V.5 #2

The Gifted Child Quarterly

Summer, 1961

MATTHEWS LIBRARY
A.S.U. TEMPE, ARIZ.

THE GIFTED CHILD QUARTERLY
Vol. V, No. 2 Summer, 1961

EDITOR
ANN F. ISAACS
EDITORIAL BOARD
J. C. GOWAN
San Fernando State College, Northridge, California
BENJAMIN FINE
Education Editor, Newspaper Alliance of America
E. PAUL TORRENCE
Director, Educational Research, University of Minnesota

MATTHEWS LIBRA
A.S.U. TEMPE, A

CONTENTS

FEATURE ARTICLES

PROBLEMS OF HIGHLY CREATIVE CHILDREN 31
E. Paul Torrence
AROUSING AND SUSTAINING THE INTEREST OF GIFTED CHILDREN IN THE STUDY OF SCIENCE 35
Ross H. Anderson
TEACHERS' REACTIONS TO GIFTED PUPILS 42
Sister Josephina, C.S.J.
A STUDY OF THE GIFTED CHILD IN CHURCH 47
Herbert B. Neff
THE NEEDY GIFTED BOOK PROJECT 51
NATIONAL GIFTED CHILD WEEK 52
SUGGESTIONS FOR FORMING LOCAL CHAPTERS 54
NAGC BOARD AND COMMITTEES 56
NURTURING THE CREATIVE RESPONSE 57
Bert O. Keeney with Denmar A. Cope
SOURCES OF MOTIVATION IN CREATIVELY GIFTED ADULTS 63
Ann F. Isaacs
HUNTER COLLEGE HIGH SCHOOL 65
Mildred T. Lawton
THE HIGH SCHOOL OF MUSIC AND ART, N. Y. CITY 67
Louise K. Wechsler
A PROGRAM FOR THE GIFTED AT THE BRONX HIGH SCHOOL OF SCIENCE 69
Alexander Taffel
PROGRAM OF PARENTS AND COMMUNITY PARTICIPATION IN EDUCATION OF THE GIFTED 71
Madeline F. Coutant

REGULAR DEPARTMENTS

PARENTS' PAGE 45
NOTES AND NEWS 68
BOOK REVIEWS 72
BRIEFING THE JOURNALS 73
EDITORIAL 74

NAGC OFFICERS
VICTOR GOERTZEL, President
Psychologist, New York, N.Y.
WALTER BARBE, Immediate Past Pres., NAGC
Kent State University, Kent, Ohio
GLADYS GRIMJES, Secretary
Public Schools, Fort Dodge, Iowa
ANN F. ISAACS, Executive Director, NAGC
Cincinnati, Ohio

The National Association for Gifted Children was founded in 1954 to aid schools, parents and communities in planning for the gifted that new programs may be wisely initiated old ones evaluated and revised; and broad support obtained that programs adequately functioning will continue to flourish.

THE GIFTED CHILD QUARTERLY is published four times a year (Spring, Summer, Autumn and Winter) by NAGC, 409 Clinton Spring Ave., Cincinnati 17, Ohio, and mailed to all members of NAGC.

PROBLEMS OF HIGHLY CREATIVE CHILDREN

E. Paul Torrence

INESCAPABLY, the individual who thinks of a new idea is in the very beginning a minority of one. Even when matters of demonstrable fact are involved, as in the Asch experiments, there are very few people who can tolerate being a minority of one. Since creativity involves independence of mind, nonconformity to group pressures, or breaking out of the mould, it is inevitable that highly creative children experience some unusual problems of adjustment. Thus, the highly creative child must either repress his creativity or learn to cope with the tensions which arise from being frequently a minority of one. Repression of creative needs may lead to actual personality breakdown. Their expression frequently leads to loneliness, conflicts, and other problems of adjustment. Educators of gifted children need to understand both types of problems.

1. *Sanctions Against Divergency*

In one of our studies, we have asked approximately 5,000 children in grades three through six to write imaginative stories concerning animals or persons with some divergent characteristic. These have given us many insights concerning the way children see the operation of their society's sanctions against being different. The following story by a sixth-grade girl illustrates many of these sanctions:

> "Far into the jungle of Africa lived a flying monkey named Pepper. Pepper was a well-educated monkey and very cute . . . Pepper was unusual too. He was not like all of the other flying monkeys. You see, Pepper didn't eat bananas like everybody else. He wanted to be different. He ate peppers!
>
> "No one ever went out of the jungle so Pepper, being different, decided to go to America! . . . When the people saw him, they began to laugh and then others began to scream. Then out of nowhere a man from a zoo came and took Pepper by surprise. . . .
>
> "Now Pepper was sad. He didn't like the cage they put him in. He made a vow that if he ever got out he would never be different again and ten minutes later he saw some bent bars big enough to fly through. All of a sudden he flew out and in two days was back in the jungle. He kept his promise too. He was never different again. He was a good little flying monkey."

I suppose *he ate his bananas!*

About two-thirds of the stories about flying monkeys tell similar tales of conformity or of destruction. Some cultures, however, are more indulgent of divergency than others. Stories written by gifted children in special classes are far more hopeful in outlook than those of gifted children in regular classes. In about 70 per cent of the stories of pupils in classes for high achieving children, the flying monkey is in some way able to persist in his flying. The stories written by children in a small Oklahoma town composed of Indians, whites, and a few Negroes also reflect this tolerance of divergency. In 74 per cent of their stories, the flying monkey succeeds.

2. *Creative Children May Not be Well-Rounded*

The highly creative child is likely to have lagged in some phase of his development. Many investigators in a variety of fields have been disappointed to find that outstanding individuals in the field under study are not well-rounded, "all-American" boys. Verbal abilities frequently will be below some of their other abilities. Perhaps the most inventive and imagina-

DR. TORRENCE is Director, Bureau of Educational Research, University of Minnesota.

tive child we have tested is a boy who has had unusual difficulty in learning to read, yet his store of information and his ability to use it imaginatively in solving problems and developing ideas is fantastic.

This problem is particularly acute at the fourth-grade level. In a number of cases, fourth graders identified by our tests as highly creative have been re-evaluated by teachers. Teachers then discover that these children are far more knowledgeable and thoughtful than they had imagined. One examiner after testing orally a certain fourth grade boy remarked: "This boy impresses me as the kind of individual who will become a top executive who can dictate to five secretaries at the same time without becoming confused." The boy's responses gave evidence of high inventive level, flexibility, and originality. This boy, however, has a serious reading disability and ranked near the bottom of his class on the written test of creative thinking.

Because verbal skills are highly valued in our society, tremendous pressures are placed on children to be "well-rounded" in this respect. The relentlessness of these pressures is symbolized in the following story by a sixth-grade girl:

> "Quack! Quack! They were after him again—the Ladies Duck Aid Society, with their hair up in pin curls and their screaming, fat ducklings swimming and holding onto their skirts. They never failed. Alas! It was getting too much for little Glob-Blob. Every day there would be quacking and screaming of ducklings while poor Glob-Blob would run as fast as he could to get away from the vicious ducks.
>
> "The reason for this was because poor Glob-Blob could not quack. So every day the Ladies Duck Aid Society would chase Glob-Blob, for they said it was for the good of the ducks, and it was not only right but they were doing a good turn.
>
> "It was lucky for Glob-Blob that the ducks were fat and flabby, for if they were limber, I will not mention what would happen. But one day, these lazy ducks did reduce, and when chasing Glob-Blob dealt him a good many hard blows. And the next day, poor Glob-Blob was at last doomed. The vicious quackers had come and the chase was on. Glob-Blob was failing. It is a shame that so noble a duck should be doomed, but 'That's life,' said Glob-Blob to himself as, slowly but surely, failing, he dropped to the ground. The quackers, very pleased with themselves, sat down for a chat.
>
> "But I shall always remember Glob-Blob and his death. So I shall let him finish his journey, where there will be no more quackers and chasers, and where at last, he may have passionless peace forever."

Many children must consider their counselors, teachers, and parents as "quackers and chasers" when we work so hard to make them become "better rounded personalities." They might contribute far more to society and be far happier and more successful by capitalizing upon their unique strengths rather than spending fruitless energy trying hopelessly to compensate for some divergent characteristic or behavior. I would not, of course, deny that it is necessary for some of our highly creative youngsters to achieve basic skills necessary for success in their chosen areas of specialization.

3. *Creative Children Prefer to Learn on Their Own*

Many creative children prefer to learn on their own and schools have been slow in providing such opportunities. Last year we conducted an exciting study in which we found that children would do a great deal of writing on their own, if properly motivated. In another it was found that gifted children in a split-shift school showed more growth in language development, science, and social studies than under a full-day schedule. Only in spelling was there significantly less growth among the split-shift children (seventh graders).

Since we have generally assumed that children do not learn on their own, we have seldom provided them with opportunities to do so. I have seen learning situations "accidentally" left "open" a sufficient number of times to have become quite excited about what would happen, if we should do so more frequently. The following story by an Oklahoma sixth grader, symbolizes this situation:

> "Once there were some monkeys sitting in a group. They were all alike except three monkeys. They were very different because they could fly.
>
> "One day some men from a park zoo were looking for some monkeys because theirs had died. They came upon the three that flew. So they took them in a cage. The cage didn't have a top to it. They were in the sun one day and the monkey said to the other, 'I wish we could get out of here.'
>
> " 'Then, why don't we fly out of here?' said the other.
>
> "They started to fly out. When they got about half a mile, some men came to feed them. When they couldn't find the three monkeys, they saw them flying away. One of them said, 'If we would have put them in a cage with a top, we would have had a real good thing here in the zoo.' "

One function of the school counselor might be to help highly creative children recognize or discover the "openings" in their cages to which they might be blinded.

4. *Creative Children Like to Attempt Difficult Tasks*

Frequently highly creative children strongly desire to move far ahead of their classmates in some areas. They always make us afraid that they are not "ready." Fortunately, however, educators of gifted children are rapidly revising many of their concepts about what can be taught at various levels of education. This terrifies many. The following recent headlines reflect such a fear:

"Caution Urged in Changing Primary into High Schools"

"Can We Rush Primary Education?"

"Don't Turn Grade Schools into High Schools, Educators Warn at Parley"

"Reading for Kindergarten, Language Too Soon Attacked."

Some of the panic may have been eased by a recent report of the Educational Policies Commission of the NEA and the American Association of School Administrators (*Contemporary Issues in Elementary Education, 1960*).

A very frequent theme in our imaginative stories is related to this problem. The young animal or fowl asks, "When can I roar? When can I crow? When can I quack? When can I fly?" Almost always, the answer is, "When you are a little older." We are always afraid that the young one might not be ready to learn and that he would be forever scarred by even the most temporary failure.

A common experience in the lives of many highly outstanding individuals has been their ability to cope with failure and frustration. Certainly, almost all highly creative scientists, inventors, artists, and writers attempt tasks which are too difficult for them. Had they not attempted such tasks, it is quite unlikely that their great ideas would have been born.

5. *Creative Children Are Searching For a Purpose*

It has been said of most outstanding creative achievers that they seemed to be possessed by a purpose and to be "men of destiny." Creative children need some purpose which is worthy of the enthusiastic devotion they seem capable of giving. Some of this need is symbolized in the following story by a sixth-grade boy:

> "There once was a South American monkey that didn't know what he was, who he was, or why he was even alive. He decided that he didn't know even the way to figure it out, so he thought he would make up a reason.
>
> "He had seen many airplanes fly overhead. He had seen many ferocious animals, many nice animals, and many machines. He had always thought that

it would be nice to fly, so he pretended he was an airplane.

"He had also heard that buzzing sound of the engines, so he called himself 'Buzz.' He also decided that he was a real fast flyer so that this was the reason he was alive.

"Now we all know that monkeys can't fly, but he didn't know this. Why he didn't even know that he was a monkey, so he kept trying and trying —and you know what? He flew!"

Perhaps this has some implications not only concerning the need for helping children discover their potentialities but for helping them achieve their self-concepts creatively rather than by authority.

6. *Creative Children Search For Their Uniqueness*

Counselors and teachers may become irritated with creative children who seem to create problems for themselves by trying consciously to be different—searching for their uniqueness. Barron maintains that creative individuals reject the demands of their society to surrender their individuality because "they want to own themselves totally and because they perceive a shortsightedness in the claim of society that all its members should adapt themselves to a norm for a given time and place."

One way in which the creative individual searches for his uniqueness is through his vocational choice. Getzels and Jackson, for example, found that their highly creative compared with their highly intelligent subjects gave a greater number of different occupations and more "unusual" or rare occupations. Their attitudes toward adult success were also different, the high creatives being less concerned with conventional standards.

7. *The Psychological Estrangement of Creative Children*

In no group thus far studied have we failed to find relatively clear evidence of the operation of pressures against the most creative members of the group, though they are far more severe in some classes than in others.

When we select the most creative members of each sex in each classroom and match them for sex and Intelligence Quotient with other children in the same classroom, three characteristics stand out as differentiating the highly creative children from the less creative ones. First, there is a tendency for them to gain a reputation for having wild or silly ideas. Their teachers and their peers agree on this. Second, their work is characterized by its productivity of ideas "off the beaten track." This explains one of the difficulties of teachers and peers in evaluating their ideas and perhaps why they show up no better than they do on traditional intelligence tests. Their ideas simply do not conform to the standardized dimensions, the behavioral norms, on which responses are judged. Third, they are characterized by humor and playfulness. All of these characteristics help explain both the estrangement and the creativity.

In the next issue, I shall discuss some of the problems which arise when highly creative children repress their creative needs and abilities.

Plan to Attend the 9th Annual NAGC Convention
April 25-28, 1962, Chicago, Ill. (Tentatively)

Observe National Gifted Child Week, October 22, 1961

Become a Life Member in NAGC

AROUSING AND SUSTAINING THE INTEREST OF GIFTED CHILDREN IN THE STUDY OF SCIENCE

Ross H. Anderson

WHAT teacher gave you the greatest intellectual boost? Whom do you remember best for creating in you a desire to learn? Helen Keller would have accomplished nothing without Ann Sullivan; we are told that Saint Paul sat at the feet of Gamaliel and learned from him; Elizabeth Barrett Browning's literary talent flourished under her husband's understanding tutelage and encouragement; and the story is famous of the student at Williams College who was inspired by Mark Hopkins.

There may be many untold stories of similar beneficial relationships in more modern times, from which emerged or will yet emerge someone of importance and greatness. What can an administrator, teacher, or a group of teachers do to instigate gifted students to use their full potential? What are the particular techniques required to create a desire within the gifted child to learn more and more?

EDITORIAL NOTE: *Those of you who have tried to convey an attitude, manner, or feeling of one person for another, or group of persons will have some idea of how elusive this can be. I had the pleasure of observing the author of this article at work as a participant in the workshop on the gifted which I conducted last summer. His apparent enthusiasm, interest, air of expectant success for the student united to create an unbeatable atmosphere of encouragement and rapport of the highest order. We are pleased to present this summary of some of his points of view.*

It will be noted the experiments on heat are extended through twelve grades. This has been done for several reasons. First, teachers interested in equipping their high school students to assist elementary school teachers, will have available guide lines. Secondly, some very highly gifted elementary age children may well be able to perform a part of the advanced grade experiments. Thirdly, the more difficult experiments may be used by the adults working with the elementary age child. Whether the instructor be the parent, or classroom teacher, the adult will find his own knowledge and appreciations expanded, and enriched by a broader scope, aiding him to do a better job.

If you are interested in the field of Science Education in general, or if the children you are now working with are of high school age a majority of the following suggestions may be of value to you. If you are now working with the elementary age child, only some of these suggestions will be immediately relevant, the rest of them, you will wish placed in your files as worth remembering at the right time.

Worth Investigating and Keeping in Mind

1. *Annual Science Fairs*
2. *The traveling Book Exhibits available for both elementary and High School, available from the Amer. Assoc. For the Advancement of Sci., 1515 Massachusetts Ave., Washington 5, D. C.*
3. *The Westinghouse Talent Search.*
4. *The programs of the National Science Foundation, Washington, D. C. Summer Seminars on College campuses for High School age children as part of their activities.*
5. *Science Clubs of America, 1719 N. St., N. W., Washington, D. C.*
6. *"The Biological Sciences Curriculum Study Newsletter," available gratis. Write to Dr. Hilda Grosman, Editor, University of Colorado, Boulder.*
7. *Honors courses for the gifted taught to the high school curriculum.*
8. *Registration for college courses, while yet completing high school.*
9. *The possibility of volunteer and sometimes paid work for students in the laboratories of various hospitals and organizations, summers and after school.*
10. *Instruct students in the lower grades.*

ROSS ANDERSON is Associate Professor of Physical Science, Kansas State College of Pittsburg, Pittsburg, Kansas.

Formal Instruction Can Begin in Third Grade

As a teacher of college physical science students, the writer is particularly interested in inspiring students to learn about science as early as grade three and up. No doubt, some science can be included in daily lessons by first and second grade teachers in regard to the natural phenomena with which these children are familiar. However for all practical purposes, third grade is early enough to begin a formal study of scientific matter. With a foundation of understanding provided by continued and regular graded lessons in the elementary and secondary schools, more college students would find a science major to their liking. In addition students in college science classes would be of a higher caliber than found by the writer in classes of preceding years.

From personal observation, though some may disagree, the writer concludes that for sound achievement in science on the college level, the better minds are needed. Therefore, early promotion of the gifted child's interest in science should be of paramount importance to educators interested in progress in various sciences for the good of all mankind.

It may be suggested that for every gifted child whose interest in science has been stimulated and furthered there has been a gifted child whose performance deteriorated, through neglect into mediocrity, or whose response to school and home has even shifted him into the category of the rebellious and delinquent. What happens when the bright pupil is accelerated and the slow pupil retarded? In some educational systems, the bright pupil, the one who profits most from an educational environment leaves school first. He spends less time there, while the slow pupil who profits least from an educational environment remains the longest. Therefore, the time spent by the bright pupil in school should be utilized as efficiently as possible.

If the program provided for a class is such that the bright pupil is bored and unstimulated, we may be sure that the pupils of medium and low abilities are equally bored. A teacher who understands modern methods of instruction, working with a class of limited size and with adequate instructional materials, especially books, books, and more books, makes a class exciting for all children whether they be bright, dull, or average.

Prospective teachers need science training in order to promote and sustain the interest of their science-inclined pupils. The writer is continually alarmed to learn of the many erroneous explanations of scientific phenomena made by a great number of elementary and secondary teachers to their classes. Teachers have referred to the common paleozoic crinoids as petrified wood or backbone fossils of fish, while still others unromantically called them cylindrical rock segments. If identified correctly, these specimens could have been used to project the students' thoughts toward the relationship between crinoids and present day sea aminals. For some more gifted boy or girl, a direction of thinking to the remote past of the warm primeval seas could have been accomplished resulting in their decision upon a career in paleontology or ichthyology.

A teacher of an astronomy unit referred to the evening star, Venus, unspecifically as "either Jupiter or Saturn." Here again, it would have been an important revelation to the gifted child to have learned the characteristic colors of the four common planets and thus identify them. A large percentage of elementary teachers who attend the writer's summer classes, when locating the Little Dipper or Little Bear, refer erroneously to the Pleiades of Taurus, the center section of Orion, parts of Sagittarius, or the small group of stars, Delphinus. These and other examples of misinformation are often presented in elementary and secondary classrooms. There is more need for mental alertness, exact information,

and inspiring elaborations to stimulate interest. The intellectual fires of the gifted especially are quenched by erroneous information.

It is consoling, however, to know that an increased effort is being made in American education to enlighten present and prospective science teachers. The National Science Foundation is contributing greatly to this endeavor by means of the various summer institutes it sponsors and for which it makes grants. It also aids greatly by other means such as the funds it provides for traveling scientist programs.

Teachers of gifted children need special training in science as well as in other subjects in order to properly incite their pupils' curiosity, develop the resulting trends of interest, and guide them to further effective study. It has been a pleasant experience for the writer, during the past three summers, to assist in a workshop at Kansas State College of Pittsburg (Kansas) called "The Gifted Child." This workshop provides an opportunity for members who are or who will be teachers of the gifted to study methods of teaching them. The phase of the program with which the writer has been concerned is "Science and the Gifted."

Gifted Children As Workshop Participants

The program is set up panel-wise and begins with the selection of four or five pupils of varying ages who are gifted, and who have an interest in some category of physical science. Such children are selected from the laboratory schools of the college and from among children of members of the workshop, or their friends, who are known to be of exceptionally high intelligence. Children from grades two through twelve are selected. The panel is made up of parent-child or teacher-child teams. The pupils are seated behind a table and before them are a number of science experiments or demonstrations which they will execute for the workshop class. The teachers and parents involved are informally seated near the front of the room. Each pupil has selected the category in which he is most interested and has previously been "briefed" although this rehearsal is held to a minimum in order to keep the responses natural. He is now ready to go ahead with his demonstration for six to ten minutes without assistance.

The following examples illustrate the type of demonstrations given on the various age levels:

Danny, a second grade pupil, was interested in "the heaviness" of different substances. He explained the difference between a balloon of air and a balloon of helium. He showed the buoyancy of wood and brass in a glass jar of water. He also used a glass beaker containing about three-fourths inch of mercury to explain the effect the dense mercury had on the flotation of a glass marble and a steel ball.

Candy, a fourth grade girl, was interested in rocks. She showed the group her rock collection and demonstrated the characteristics of mica, the difference of the effect of dilute hydrochloric acid on marble and granite, the peculiar characteristics of fibrous asbestos rock, and how to distinguish the common salt crystal from the calcite crystal. She also showed and named several fossil rocks.

Carol of the sixth grade was interested in astronomy. She could identify most of the constellations and name the prominent stars. She had made an elaborate notebook of the seasonal constellations. With the aid of a simple planetarium and charts, she pointed out to the group the principle constellations and the prominent stars. She knew more about these nightly neighbors of ours than any member of the workshop class.

Walter, a fourth grade boy with a very high I.Q. made some calculations on the blackboard of the distance to stars by using the speed of light and he also figured the weight of the earth by knowing its radius and density.

These are a few of the actual performers in the workshop demonstrations. When the pupil has completed his part of the program, the teacher or parent gives a brief resume of the factors possibly contributing to the pupil's interest in science.

Although these programs serve as teaching material for the prospective workers with gifted children, there is a by-product which is not immediately demonstrable. Pupils who have appeared on the panels feel a pride in their participation, and teachers and parents have found it a worthwhile and even exceptional experience for the child. Why? Because it has brought the public recognition and encouragement needed to sustain and increase the child's interest. Often, the reaction is deepened and broadened until a whole class is included. Effects can be far-reaching.

It has been found that students who participated in the panel, "Science and the Gifted Child," obtained and continued an interest in science because both the parent and teacher cooperated in the promotion of the child's scientific interests. A little work after hours on the part of the teacher, and the surrender of some adult interest on the part of the parent, for the sake of encouraging the child's participation in a scientific area of study is a sacrifice that rewards both parent and teacher bountifully.

Home Activities can Promote Scientific Interest

The field of science offers so much in a number of diversified areas that it is easy to promote an interest in at least one specialized subject. For instance, everyday experiences bring each boy and girl in direct contact with physical science phenomena. For example, the law of centrifugal force is exemplified in the home by the spin-dry cycle of the automatic washing machine and the throwing of cake batter to the sides of the bowl in the electric mixer. It is also illustrated by the need to bank highways on curves and by something with which every child is acquainted—carnival apparatus. Who does not remember how he leans outward on the horse when riding a merry-go-round? And how about the Whirl-a-Whip? The law of levers is convincingly demonstrated by the use of various tools in the home shop. The list of examples is endless. They can be used to advantage by parents, teachers, and interested friends to give impetus to the gifted child's inclination. A bit of attention, suggestion, indicated interest, or active participation on the part of such adults sparks the child's natural inquisitiveness into a flame of active learning.

It is possible, the writer firmly believes, to interest gifted pupils of all grade levels in some area of the physical sciences. It is also possible to present some phase of these subjects: light, electricity, sound, heat, mechanics, geology, meteorology, and astronomy on every grade level in a formal way. The latter statement has been verified by the participants' interest in, and ready response to the panel discussion and science demonstrations. The following outline indicates how the subject of heat could be handled on the various levels, Grades I through XII.

Suggested Experiments on Heat Suitable for Elementary Grades

GRADE I WHAT HEAT DOES

Demonstrations
- Burn a splint of wood.
- Melt some paraffin.
- Warm your hand with a candle.

Questions and Statements
- What warms our houses?
- What cooks our food?
- Heat burns our fingers.

GRADE II HEAT MOVES THROUGH SUBSTANCES (CONDUCTION)

Demonstration

Select several spoons including sterling silver, silver-plated brass, stainless steel, wood, and plastic. Place the spoon bowls in a small pan of hot water with the handles projecting over the brim. Touch each spoon and see which handle is the warmest.

QUESTIONS

What materials allow heat to travel through them?

What materials prevent the movement of heat?

GRADE III LIQUID EXPANSION

DEMONSTRATION

Make a liquid thermometer using a long piece of glass tubing, a one-hole stopper, a bottle or flask, and some Prestone. Pack the bottle in ice until the level of the Prestone is at its lowest point in the glass tube. Replace the ice with cold water and heat gently until the level of the Prestone reaches its highest point in the tube. Compare this instrument with the commercial thermometer.

QUESTIONS AND STATEMENTS

Read several temperatures with the commercial thermometer.

Explain how the thermometer works.

What is the liquid used in the thermometer?

GRADE IV HEAT CAUSES SOLIDS TO EXPAND

DEMONSTRATION

Attach a piece of rubber hose to the end of a tubular curtain rod. Clamp the device parallel to the edge of a table with the clamp on the metal tube near the rubber hose. Place a large needle under the end of the metal tube with the eye projecting over the edge of the table. Now place a toothpick in the eye of the needle. As warm air is blown through the tube by means of the rubber hose, the metal tube will expand and roll the needle, as shown by the movement of the toothpick.

QUESTIONS

Do the rails of railroads expand and contract?

How is this taken care of in order to avoid accidents?

Do telephone wires expand and contract?

Why do glass dishes break when heated by a flame?

Why do pyrex, or other flame-proof dishes, not break when heated by a flame?

GRADE V HOW DOES HEAT TRAVEL THROUGH GASES AND LIQUIDS?

DEMONSTRATION

Make a convection apparatus by placing two blocks on either side of a lighted candle and setting a lamp chimney on the blocks over the candle. There is now a vent for air to move under the edge of the chimney. Light a tight roll of paper and allow the smoke to go under the chimney. The smoke follows the convection currents. Why does the air circulate?

QUESTIONS

Can you make a whirler that will rotate in air currents?

How are air currents related to our weather?

How are some homes heated by convection?

DEMONSTRATION

Chill some cake coloring and with an eye dropper place it near the edge of a glass of warm water. Watch it descend and move across the bottom. Now repeat, using some very hot water in the glass. Note how fast the color current moves.

QUESTIONS AND STATEMENTS

What causes currents in oceans?

Name some ocean currents.

How do ocean currents affect climate?

GRADE VI A QUANTITATIVE MEASUREMENT OF HEAT

DEMONSTRATION

Into two identical pans place one-half pint and one quart of water. Place thermometers in each pan and heat each equally. When the half pint of water gets hot, notice the temperature of the quart of water.

QUESTIONS

Has each pan received equal amounts of heat?

What is a British thermal unit?

Why did the pans of water show different temperatures?

Do seas and lake heat slowly? Why?

Does it take long to heat the water in a water tank?

What is the difference between quantity of heat and temperature?

GRADE VII INSULATORS OF HEAT

DEMONSTRATION

Wrap a strip of paper around a piece of iron about one inch in diameter and place the paper in the flame of a candle. Next wrap a strip of paper around a piece of window shade roller or broom stick and place in a candle flame.

QUESTIONS AND STATEMENTS

Which paper took the longer to burn?

Which paper burned immediately? Why?

Which material is the better conductor of heat—the paper or the wood?

Which material would be classed as an insulator of heat?

Name four more conductors of heat.

Name four more insulators of heat.

Are the walls, windows, and ceilings of homes good conductors or insulators of heat?

Are bottoms of cooking pans insulators of heat?

Name an object found in the kitchen that is insulated?

Which feels colder to your bare feet—a a rug or a cement floor?

GRADE VIII HOW DOES A REFRIGERATOR BECOME COLD?

DEMONSTRATION

Place some rubbing alcohol on your hand and note the sensation. Does it feel hot or cold? This sensation is caused by evaporation. Allow air from a balloon or tire to blow across your dry hand. Does it feel hot or cold? This sensation is caused by expansion. Feel the compressor at the filling station. Is it hot or cold?

QUESTIONS AND STATEMENTS

Evaporation and expansion produce "cold."

Compression and condensation produce heat.

In what part of the electric refrigerator would you find evaporation and expansion?

In what part of the electric refrigerator would you find compression and condensation?

Why do you get cold in a wind if you are wearing a wet bathing suit even though it is warm weather?

What is the source of the heat that comes from an electric refrigerator?

GRADE IX HEAT TRAVELS BY RADIATION

DEMONSTRATIONS

With the aid of a large convex lens such as a reading glass, focus the sun's rays and burn a paper towel or tissue. Fill a spherical rosebowl or flask with a red liquid (iodine mixed with carbon tetrachloride is good.) Now direct the rays from a red heat lamp on the bowl. Note a focal point about eight inches from the other side where the rays converge and the heat is intense. When the bowl is removed the heat is less intense. Hold a radiometer in the sun, near a lamp bulb, or near a heat lamp.

QUESTIONS AND STATEMENTS

What is the principal source of the earth's radiant heat?

How is radiation used to heat our homes?

Why did the reading glass burn the paper?

Is it heat or light that passes through the red liquid?

Which can pass through clear glass the easier—heat or light?

What causes the radiometer blades to move?

Do green houses trap the sun's energy?

GRADE X HEAT AND ELECTRICITY

DEMONSTRATIONS

Plug in a small hot plate or other electric heater or electric iron. Note how soon heat is given out. Secure two wires made of different metals and twist the bare ends of the two together with pliers. This is a thermocouple. Attach the other ends of the wires to a millivoltmeter, milliammeter, or galvanometer. Place the twisted section in a flame or burner and note the indicator movement of the electrical instrument.

QUESTIONS AND STATEMENTS

What devices or appliances heat with electrical units?

Find out which wire is the better heater—copper or nichrome.

Can you see the heating element of an electric toaster?

Can you get heat from a lamp bulb?

Thermocouples provide small currents of electricity which control gas furnaces, gas hot water heaters, and some gas stoves. Could we supply all our electricity with thermocouples?

GRADE XI SPECIFIC HEAT

DEMONSTRATION

Secure a block of paraffin about 3 by 6 inches and place on the table. Place brass, glass, iron, and lead spheres of equal weight in a pan of water and heat to boiling. Quickly remove the spheres, dry, and place on the paraffin. Note the depth the spheres sink into the paraffin and the amount of paraffin melted by each sphere.

QUESTIONS AND STATEMENTS

The amount of paraffin melted in each case is in direct ratio to the amount of heat stored in each sphere. It takes different amounts of heat to heat the various materials the same number of degrees. The stored heat was given to the paraffin as the sphere cooled.

It takes more heat to raise the temperature of water one degree than it does to raise an equal weight of other materials one degree.

It takes one calorie of heat to raise one gram of water one degree centigrade. Which would provide the more heat—four pounds of water in a rubber hot water bottle or four pounds of iron the same temperature wrapped in a cloth?

GRADE XII HEAT AND WORK

DEMONSTRATION

Place a pint of water in the mixing bowl of an electric mixer and record its temperature with a thermometer. Now turn on the mixer and beat the water for about three minutes. Again take the temperature of the water. If you use a hand beater and exert a force on the handle of one pound for a distance of 778 feet, one pound of water will change one degree fahrenheit in temperature. (One British thermal unit = 778 foot pounds).

QUESTIONS AND STATEMENTS

One pound of gasoline represents 20,000 BTU. If it takes a force of 100 pounds to move a car, how many feet can it be moved with one pound of gasoline if all the energy is used to push the car?

What happens to the wasted energy from the car engine?

Describe the strokes of a four-cycle engine.

How does heat cause a rocket to move?

What is the source of heat for modern railroad locomotive power?

What was the source of heat for the railroad locomotive engines thirty years ago?

Define a calorie, a Kilocalorie, an erg, and a joule.

THE TEACHER'S ROLE

Teachers can stimulate the gifted child's interest in science by the following methods:

1. Provision of books, magazines, and other scientific material on the child's level. (Lists of these are available from various sources such as libraries, book

publishers, traveling scientists, academies of science, National Science Foundation, and other scientific organizations.)

2. Arrangement for exhibits and programs in which the child can participate, or encouraging the child to participate in local, district, or national science fairs.

3. Guidance of the child into special studies in furtherance of his interests.

4. Giving demonstrations in the classroom.

5. Securing demonstrators and speakers from outside sources.

6. Visits to study industrial processes or to museums, areas of geological interest, etc.

7. Encouragement of collection of science objects as a hobby.

8. Aid to the child in obtaining materials needed in his construction of exhibits or for his research.

9. Much praise and encouragement for the child's effort.

The Parent's Role

The part parents play in the gifted child's reaction to science study must not be underestimated. Their encouragement of the child to continue in it can be given in various ways. Some of these duplicate the methods listed for teachers, but some are unique to the home situation. They are:

1. Provision of books and magazines, or access to such, which deal with or include science material on the child's level.

2. Promotion of the child's participation in the science merit badge work of the Boy and Girl Scouts.

3. Provision of time, space, and materials in the home for science hobbies.

4. Attention given to natural science phenomena on trips.

5. Visits to museums, aquariums, industries, and such when traveling in areas where these are available.

6. Giving permission for child to participate in programs, contests, fairs, and exhibits where he may demonstrate results of his own study and research.

7. Discussion of scientific topics in the home. (This might require reading and research on the part of parents, also.)

8. Constant praise and recognition for the child's achievement and progress.

The Personal Touch of the Teacher is Invaluable

Although the gifted child's interest in science can be promoted and maintained by challenging the child, there is danger in some instances of expecting too much and assigning work far too advanced for the child in view of his preparedness, background, and experience. In addition, the personal touch, as aided by the guidance and encouragement of the teacher, must be present or the child may become discouraged.

A recent case in point is that of a group of high school students of higher ability who enrolled in physics in a year that the PSSC text[1] was used experimentally by various selected high schools over the nation. These students were both juniors and seniors; some had taken geometry and trigonometry previously; some had taken only geometry; and some were taking geometry concurrently with the physics course. Thus their backgrounds of preparedness differed considerably. In addition, they were required to "dig out" solutions of the problems and to perform the experiments without previous introduction and without help.

The class was small and each student could have received individual help in the way of indirect suggestions or questions which might have turned his thinking in the right direction. However, this type of instruction was available only

[1] *Physical Science Study Course,* an effort to develop a satisfactory method of teaching physics in high schools, which would prepare the students for college physics, and also develop their learning by thinking instead of by rote memorization of laws. This text is still being revised as results of the experimental use are determined.

(Continued on page 46)

TEACHERS' REACTIONS TO GIFTED PUPILS

Sister Josephina, C.S.J.

THE question of the education of the superior pupil ranks high in teacher conferences, workshops, and inservice planning. During the past decade, especially, momentum was apparent, due in large part to the pressure from without regarding the type of curriculum being offered to the high ability group. As each epoch is marked by a significant contribution made during that period, it may be rightly stated that the decade 1950-1960 is best characterized as the coming of age of the problem of recognizing, stimulating, and challenging the gifted pupil.

Since the bearers of the scholastic tradition are, to a large measure, teachers, it is fitting that some data regarding the gifted be garnered from them.

Sixty-six teachers were given the statement: There are more bright boys than girls. Approximately 41 per cent agreed with the statement; 21 per cent felt that there were more bright girls than boys; and 38 per cent neither agreed nor disagreed, indicating that there was a doubt about or a distinction to be made concerning the statement.

Once the superior pupil is recognized, the problem then arises for the classroom teacher of making adequate provision for his intellectual capacity. Many types of organization may be found in the current texts, each with certain advantages and disadvantages. What plan was selected by the group of teachers? "If you had a bright pupil (130 I.Q.) who was doing "A" work, which plan would you use?

1. Acceleration
2. Enrichment
3. Allow him to progress, but ask for more work
4. Give extra work in his best subject

To this question, 35 per cent would use enrichment; 29 per cent felt that allowing the bright pupil to progress normally, but asking for more work would be the most effective means of caring for him; 27 per cent indicated that giving extra work in his best subject would solve the problem; and 9 per cent checked acceleration.

It appears from these per cents that more work and extra assignments (closely related) will care for the needs of the superior pupil. This writer does not agree wholly with such thinking or planning. The notion of "more" is not the answer to complete understanding of the above-average pupil, but rather the notion of "degree." In other words, it is not "how much," but "what kind" of educational fare which will satisfy the scholastic palate. For too long, teachers have followed such a philosophy of "keep them busy," "double the amount," rather than more depth or vertical planning in the curriculum.

If the pupils were accelerated, the following factors should be considered: 1. Social Adjustment; 2. Maturity; 3. Achievement; 4. Health; 5. Interest in Work; 6. Work Habits; 7. Reading Ability; 8. Motivation; 9. Emotional Stability; 10. Independence in Work.

Intelligence testing plays a major role in the identification of the gifted. Besides testing, teachers were asked to indicate other criteria characteristic of gifted pupils which might be used to help identify them. They indicated the following: Grades Received, Ability to Reason, Class Participation, Use of Vocabulary, Expression of Ideas, Reading Ability, Quality of Work, Speed of Work, Breadth of Interest, Intellectual Curiosity, and Alertness.

Once the gifted has been identified, then the problem arises as to the best academic plan to care for him. Teachers were asked to describe the various ways

SISTER JOSEPHINA, C.S.J., is Professor at Boston College, School of Education, Boston, Mass.

they have found successful in caring for this pupil. They are as follows: To help slower pupils; To do research; To act as group leader; To act as teacher aide; To do extra work; To make reports to class; To do oral reading; To work on special projects; To participate in and lead class discussion; To organize and plan work for class; To do advanced work; To write and edit school paper.

Do teachers desire a group of gifted pupils? When queried on this item, 47 per cent indicated that they would like to teach such a class, while 53 per cent said they would decline such an offer.

When questioned further as to the reason for wanting or not wanting to teach a class of above average pupils, the reasons in Table I were given.

Realizing that administration holds the prime place in the over-all planning and organizing of classes for the above-average pupils, the teachers were asked to tell whether their principals had shown any concern for this pupil. It is recognized that the question was most general in its application; yet 55 per cent stated that their principal was concerned and 53 per cent replied negatively regarding the gifted. The slight difference in favor of the interested and alert principals indicated that a large percentage are scholastically blind or near-sighted when administrative policies should be emanating from their citadel of authority. As dedicated as teachers may be, having the solid support and stimulation of a principal can be a help to teacher morale and effectiveness.

Slight research has been uncovered related to the qualifications of the teachers of the gifted. Because of the situation, challenging and demanding, it is felt that not every good teacher would be effective in dealing with a class of above average ability. The teachers were asked to list the two outstanding characteristics of the teachers of the superior pupil. The following summarizes the results:

Respondents' estimates of characteristics of teachers of the gifted are as follows: 1. Adequate professional and academic preparation; 2. Above-average intelligence; 3. Mental alertness; 4. Expert in particular teaching area; 5. Deep concern for the gifted; 6. Resourcefulness; 7. Adaptability; 8. Ability to inspire leadership; 9. Initiative; 10. Enthusiasm; 11. Humility; 12. Desire to work hard; 13. Eager for knowledge; 14. Perseverance; 15. Ability to take a challenge.

Sex differences in intelligence are not

TABLE I

SUMMARY OF REASONS WHY TEACHERS WANT OR DO NOT WANT TO TEACH A CLASS OF GIFTED PUPILS

Reasons for Wanting to Teach the Gifted	Per Cent	Reasons for Not Wanting to Teach the Gifted	Per Cent
Challenge to teacher	27	Insufficient preparation and experience	23
More educational stimulation	14	Pupils too cocky; over-confident	21
Possible to have pupils achieve more	14	Too difficult to handle	18
Teaching is easier	8	Time lacking for lengthy preparation of class work	11
Pupils' willingness to learn	8	More secure with average	9
Personal satisfaction	7	Better work from slow	6
Helps to develop leaders	4	Do not believe in special classes	3
Motivated easily	4	Do not like the many discussions the gifted bring	3
Demands better preparation	4	Not sufficiently motivated	3
Work more appreciated	2	Poor class spirit	3
Likes speed of work	2		
Learns from pupils	2		
Keeps teacher humble	2		
No behavior problem	2		
Total	100	Total	100

significantly different; yet, for the most part, research has stated that regarding innate capacity and actual performance, significant differences do appear. To get a reaction from the teachers, three questions were asked.

The reactions of the teachers questioned are as follows: 55% rated the highest I.Q. in their class at the present time—a boy; 36% listed as top performer in their class—a boy; and 58% said that the pupils with the highest I.Q. rank first in achievement.

Noting the disparity between ability and actual performance, teachers should view such a discrepancy with some alarm. If only 36 per cent of the boys who ranked as having the top I.Q. are producing according to their ability, teachers and administrators perceiving this gap should take means—diagnostic and remedial—to discover the underlying causes.

The questionnaire was constructed and evaluated by the writer and distributed to teachers who are students in graduate classes and to a group of teachers outside the graduate school environment, all of whom possess a bachelor's or master's degree. The following pertinent findings are summarized:

1. Teachers stated that there were more bright boys than girls, 41 per cent agreeing with the statement. However, 38 per cent did not check a response, indicating that they did not know or that they were undecided as to the answer.

2. Of the plans caring for the gifted, 35 per cent advocated enrichment programs while only 9 per cent choose acceleration. Worthy of analysis are the percentages given by the group who felt that asking for more work or giving extra work would be the most effective means. Approximately 56 per cent gave assent to these two practices.

3. A consideration of the social adjustment of the child to be accelerated ranked as first choice among the factors to be studied in this situation. Identical ranking were given maturity and achievement (18 per cent each).

4. Arithmetic was chosen by the respondents as the best-liked subject, while grammar was indicated as the least-liked subject by classes of gifted students.

5. Grades received (29 per cent) and ability to reason (14 per cent) were two factors teachers would consider besides test scores from intelligence tests in identifying the gifted.

6. Teachers use the gifted pupil in many ways, and helping the slower pupil appears to be the top choice of teachers (23 per cent).

7. Approximately 27 per cent of the respondents stated that they would wish to teach classes of the gifted because of the challenge to them. Yet, 23 per cent stated that they would not wish to teach classes for the gifted because of a lack of preparation for and experience with classes of the gifted. A further comment that the gifted were over-confident and consequently they would not wish to work with them was given by 21 per cent of the teachers questioned.

8. Principals are concerned with the educational plans for the gifted as shown by 55 per cent of the responses. As this is heartening, the 53 per cent of the principals who teachers stated were unconcerned and uninterested are a matter of concern.

9. The only outstanding characteristic for teachers of the gifted is an adequate professional and academic preparation—a reply given by 19 per cent of the respondents.

10. The top I.Q. placement in these teachers' classes was held by boys 55 per cent of the time, yet only 36 per cent of the boys placed first in achievement when compared to the girls.

BE A LIFE MEMBER OF NAGC

PARENTS' PAGE

In lieu of the *Parents' Page* this issue is featuring letters received from parents. These afford a cross section of the problems parents of gifted children are attempting to solve.

Some time ago I saw reference to your organization in a newspaper suggesting that parents of bright children contact you for help in training them and in supplying what the school does not.

Our oldest son is six years old and in the first grade of a public school. The class work seems to be geared to the slowest child. They are now writing up to number 10 which our son did before he went to kindergarten. The reading is extremely slow and of the "Oh Jane, Oh! Oh!" variety. He is so eager to learn and so quick to grasp and retain anything he reads or has read to him. We hope to keep him from getting bored and settling down to using the bare minimum of effort that the school requires.

Any help that you may be able to offer us will be gratefully received.

R. D. S.
Front Royal, Va.

In an effort to avoid writing a "please-send-me-all-you-know" letter, I shall give you a few specific personal details. I am deeply interested in the problems of gifted children from three separate angles:

1. I have three of my own, and am not at all convinced that our local school system's policy of enrichment and not advancement will make the best use of their potentialities.

2. I am, belatedly, a university student, majoring in psychology, with the avowed intention of becoming a guidance and counseling psychologist in this same school system, if they will have me when I qualify.

3. I am a member of a study group, sponsored by the AAUW, which is currently investigating the problems of identifying and educating gifted children—what is being done here, what could be done here, and what is being done elsewhere.

I would deeply appreciate your sending me any publications you may have which would bear on any of these angles.

I learned of your organization from Mary B. Hoover's article, "Guiding the Gifted," in the October, 1958 issue of Parent's Magazine.

M. L. A.
Reno, Nevada

We have a gifted child and feel unable to cope with the many problems. Will you please give me information about your magazine, cost and how we may subscribe.

Mrs. J. W.
Henderson, Ky.

Please—please send all the information you possibly can on Gifted Children.

I'm like the woman in Dr. Popenoe's article—Q. There seems to be plenty of help for parents with retarded or handicapped children; but why doesn't somebody help parents of gifted children. A. Write to Mrs. Ann F. Isaacs, 409 Clinton Springs Avenue, Cincinnati 17, Ohio. She is president of the National Associated for Gifted Children.

Oh, please Mrs. Isaacs help me, but not like when I wrote to one source seeking assistance for help on the gifted child. They just referred my letter to a Bible story salesman and thought just by purchasing a set of Bible story books from them would solve our problems.

Our oldest boy is 9, is bored with most of the things 9 yr. olds do, just seems to be a misfit everywhere in everyway but we are told by professionals that he is gifted. Please send us any help or information on the subject you can. His main interest is science, but has become bored "just reading about it" but that seems to be all a 9 yr. old can do on the subject. I'm afraid he is getting disgusted with school and we know he doesn't try as hard as he should as his grades are not what they should be, they say he just gets careless and unless he earns all "A's" he won't get them either, but that he should earn all "A's."

Thanking you in advance,

N. P. L.
N. Manchester, Ind.

Please send me information to help gifted children. Our son, 5 yrs., is slightly above average. His IQ is 150. He can beat many adults playing checkers, his current interest. He goes to kindergarten and is beginning to adjust to group life. He still wants to boss everything and has trouble making friends with boys. He gets impatient with his 3 yr. old sister and then often hits her.

We have let him go ahead with anything that interests him. We always look his questions up in the encyclopedia. He likes to draw and color—gets details well, but is not too artistic. He sings very well, but does not want to practice playing the piano. (I'm a music teacher.) He says he wants to be a scientist. We got him a microscope for Christmas. He is strong and healthy, likes to roller skate and play outside. He likes to pound nails and make things out of wood and cardboard boxes.

Any information and advice will be greatly appreciated.

T. M.,
Antwerp, Ohio

(Continued on page 46)

PARENTS' PAGE

(Continued from page 45)

I am writing for information on gifted children. Our 8 year old daughter has shown indications of being gifted. She taught herself to read before she started school. When she was in the 1st grade the teacher tried her out in reading and found she could read 4th and 5th grade reading material. She shows signs of being bored with school and the teacher she has now in the 3rd grade says she hasn't begun to use the potential she has in her mind. We live in the country and she goes to school at a school near home where they have 2 grades in each room. They teach grades 1-6 and then they go to Barnum to school when they are in 7th grade and on up.

Her 1st and 2nd grade teacher understands her better than the 3rd and 4th grade teacher and she suggested we give her I.Q. tests and maybe send her to a special school. We asked in our county office about tests and they said it would cost $10-$15 for a test. Can't they be given through the school? We can't afford to spend so much money just to find out.

We have information on a special school in Minneapolis called Northrup Collegiate school. We are putting our oldest girl through college and our 2nd girl is a junior in high school. Edith, our 8 year old, is our youngest. We are farming some and my husband works at the local lumber yard so we don't have enough income to pay tuition for Edith to a private school. Could you give us further information on scholarships and schools, tests, etc.

We want to do what is best for our daughter. We don't want her to get discouraged and tired of school so she won't care to learn.

We will be looking for a letter from you, and thank you in advance.

Mr. H. B.,
Barnum, Minn.

Please send me further information about your group. I found your address in the booklet "Your Gifted Child"—U.S. Dept., Health, Education and Welfare. Our daughter, 14, has consistently excelled scholastically and maintained a wide variety of interests and activities. Our son 8, also is doing well scholastically even though when he started to school his teachers warned to not expect him to do as well as his sister—after two years the teachers tell me he will give his sister a "race" that he is doing every bit as well as she—And our 3 year old son doesn't appear a bit "slow" so far.

We, as parents, feel a great joy to have such children, but we are keenly aware of the responsibility and privilege of rearing them. We just want to do the best parent job we are capable of and feel you may have some pointers.

M. B. P.,
Oak Hill, W. Va.

BE A LIFE MEMBER OF NAGC

SCIENCE

(Continued from page 41)

through inexperienced helpers because of the instructor's heavy work load in other fields. Everyone in this gifted class successfully completed the course by dint of much hard work, but complaints were loud and bitter. A large per cent of them felt discouraged enough to change their major interest to a subject other than physics. Some even vowed never to take another science course. It can readily be seen that the lack of proper preparation, plus the lack of adequate help and guidance, the personal touch, completely demoralized a group who could have been won to the study of science by a less strenuous and more personally conducted course.

Teaching some children is like molding clay, if a mistake is apparent it can be remedied by some manipulation or adjustment before it is dry. Working with the gifted, however, because of their sensitive nature, is like sculpting fine marble: an error here or there is difficult to remedy, often irreparable; and the value of the finished product is greatly altered.

REFERENCES

1. Walter W. Cook, "The Gifted And the Retarded in Historical Perspective," *The Phi Delta Kappan,* XXXIX (March, 1958), 247-255.
2. William S. Learned, and Ben D. Wood, *The Student and His Knowledge.* New York: The Carnegie Institute for Advancement of Teaching, 1938.

We have a daughter 16 with an IQ of 138. When she started her junior year in high school this fall, she became emotionally upset and had a hard time getting settled in school. The school counselor thought she had been pushing herself too hard. His advice to her was "Make a C average—be a regular gal." She is having fun—made 2 C's, 1 B and 1 A last 6 weeks. She was ashamed of her card but doing just what she has been advised! She isn't busy enough at school. She is capable of more and better work.

Mrs. D. M. W.,
Columbia City, Ind.

A STUDY OF THE GIFTED CHILD IN CHURCH

Herbert B. Neff

MAJOR facts of our time include our apprehensive terror of the cold war, and our rapid scientific advancement with its incredible technological progress. Our existence tomorrow demands not only scientific ability and technical ingenuity, but our continued survival may now depend more upon our social and spiritual skills than upon our dexterity in manipulating atoms. Anne S. Hoppock states that social inventiveness, moral courage, and high ethical standards are needed if we are to live, and if we live, to make life worth while. Not only are these qualities needed by leaders, but also by people everywhere (1).

The church has traditionally stood on the major premise that man is not only in need of physical, emotional, and intellectual development, but he needs spiritual and social development as well. It is in the areas of spiritual values, ethics, morality, and human relationships that the church seeks to make its peculiar contribution.

In the church one constantly hears pleas for more ministers, college teachers, and leaders in human relationships. Outside the church one hears statements similar to this made by J. Edgar Hoover who had this to say about the importance of religion in American life today: "The Christian pulpit is today one of America's most formidable barriers against communism (2)."

Yet in spite of the role the church has set for itself, and the role others expect it to play, the church today is almost totally neglecting the only source it has for such leadership—the gifted child in its fold.

What is the Church Doing for its Gifted Children?

In order to answer this question two investigations were conducted. First, a search was made for articles and books in the field of religious education and the church school in the last thirty years which deal with gifted children. Every source available was used. No articles were found which were discernible by title that had anything to say about the church and the gifted child. The only literature discovered was a small book by Charles F. Kemp (3). Half the book was devoted to the retarded child. Kemp confirmed the absence of literature on the subject. It is noteworthy that Kemp's contribution was for the most part a re-statement and summary of the findings and writings of Terman, Hollingworth, Witty, and others. Of course any information on the gifted child is relevant, but the gifted child in the church presents many problems peculiar to this situation which are different from those of the child in the public schools. Of these problems and of the responsibility of the church to the gifted child incredibly little has been said.

Furthermore, no denomination has prepared any teacher's guides, nor any curriculum materials for the gifted. However, there is one ray of hope in this area. The International Council of Religious Education is now preparing a leadership training course on the exceptional child, which will at least provide a brief introduction to this subject.

The second investigation consisted of a thorough telephone survey of the Protestant churches of Greater Akron, Ohio,

This is a study of the gifted child in the church based upon a survey of the religious education literature on the subject of gifted children, and a survey of the programs for gifted children in the Protestant churches of Greater Akron and Greater Cleveland, Ohio.

The writer is an ordained minister of the Church of God (Anderson, Indiana), presently pastor of the Church of God in Greensburg, Ohio. He is a graduate of Anderson College, and has taken his theological studies in Oberlin Seminary and Moravian Seminary. He also has done some work in Education at Kent State University. This paper began as a project in a class on the Psychology of the Gifted Child under Walter B. Barbe.

and a spot check of the Protestant churches of Greater Cleveland. In all about three hundred fifty churches were contacted in the Akron area, and twenty in Cleveland. Those selected in the Cleveland area were large, located in the communities with the highest socioeconomic environment, and were varied as to denomination. From the results obtained in the Akron survey, it was believed that if any of the Cleveland churches were doing anything to meet the needs of the gifted child it would be among those selected.

The telephone inquiry was made directly to the pastor or the director of religious education. The caller introduced himself, explained the purpose of the call, and then asked, "Is your church or church school doing anything to meet the needs of the gifted child? Are you using any special teaching methods, or materials, or special classes for your gifted children?"

The reply from the larger churches (five hundred members or more) was almost invariably, "No, we do not. But I suppose we should."

When they were asked to guess what the drop-out rate for the brighter children might be, they usually estimated that it was lower than the average, and added a comment similar to this: "We lose mostly the disinterested troublemakers. We seldom lose the really bright and interested pupil."

Two inferences may be drawn from this estimate. One, it would seem that pastors and church school directors are no more skilled at casually identifying gifted children than Lewis' (4) study revealed average public school teachers to be, but interpret good behavior and interest as marks of high intelligence. Secondly, the churches in general do not realize that they have a problem concerning their gifted children.

The responses from the smaller churches were more varied, and were usually in this vein: "We have no geniuses in our church." "Our children are just normal boys and girls." "Our church is too small to do anything for the gifted children." "We feel that the handicapped child needs more special help."

During every call the pastor or church school director was asked if he knew of any churches anywhere that were doing anything to help the gifted child. Invariably the response was negative.

From the survey covering approximately a potential of fifteen hundred churches, only three were found who were doing anything to meet the needs of their gifted children. One was a very liberal church in Cleveland, and surprisingly, the other two were of the same quite fundamentalistic faith, in the Akron area, who were planning for the gifted independently and without the knowledge of the other.

All three churches were large with memberships of about seven hundred each, and were located in communities somewhat above the average economically. The Cleveland church was located in a highly "favored" suburb.

Four years ago the Cleveland church felt that the standardized curriculum furnished by their denomination was not of sufficient quality, advancement, and interest to meet the needs of their children. As might be expected considering the socioeconomic status of its membership, the average child is at least bright if not gifted. In one average (nonselective) high school age class of fourteen, five are National Merit Scholarship award winners.

In order to provide a curriculum that would interest and help these children, the church formed its own curriculum committee headed by the pastor and the director of religious education. As a result of these efforts materials for every class were prepared for the teacher only. He presents the subjects in such a way as to stimulate discussion, questions, and thinking that leads the child to form his own conclusions. Since this church holds one of the most liberal positions in the-

MATTHEWS LIBRARY
A.S.U. TEMPE, ARIZ

ology, there are no prescribed pat answers, creeds, dogmas, or beliefs to be learned. Any answer that meets the spiritual, emotional, and intellectual needs of the individual is the right answer.

In the younger groups the activities consist mostly of directed play, gradually adding rhythm movements, music, and creative arts. The teacher usually reads or tells a story. At five years they begin to share their ideals and feelings. Worship does not begin until they are in the sixth grade. Throughout, ethics, morality, and human relationships are stressed. Beliefs which foster guilt feelings are carefully avoided.

Considerable attention is given to the parents by providing special classes for them. Reading is encouraged, especially authoritative books on child care and development, psychology, social adjustment, and recommended books on religion.

No attempt is made to provide special groups or acceleration for the gifted, but each teacher uses whatever materials and methods he feels is necessary to meet the needs of each individual. It would seem that this church and its program provide a natural environment for stimulating and educating its bright and gifted children. In this it seems to follow somewhat the pattern of public schools in the upper-middle class suburbs, as the studies of Robert Havinghurst revealed (5).

The only evaluation made is that of interest, which seems to be unusually high as the drop-out rate is only about ten percent. This rate is very low when compared to the average for all church schools which runs close to sixty percent. Even at that many of their withdrawals are as a result of moving families.

In the other two churches which were found to be helping their gifted children, one is using enrichment in regularly formed classes for juniors, grades four through six. Identification is made solely on the basis of the observations and judgment of the department superintendent and teachers. The replies in answer to questions concerning methods and materials used for enrichment were vague. Interest seems to be high as shown by the excellent attendance in these classes. No one seemed to know what happened to the bright children who were promoted out of these classes.

For their gifted children the second church is using special classes within the departments of juniors and intermediates, grades four through nine. The children are carefully selected by the teachers and the church school superintendent on the basis of observation, and placed in the special groups without the knowledge of the children or their parents. This was done to escape criticism from other children and their parents. (One wonders how effectively this accomplishes that purpose.) Accelerated material is used.

It is significant that in the first church the religious education director is the sister-in-law of Merle Sumption of the University of Illinois, who has published several books and articles on the gifted child. In the second church the enrichment program was organized by a teacher of a special class for gifted children in the public schools. And in the third church the accelerated groups were set up by the church school superintendent who is also a superintendent of a public school system who is interested in gifted children.

Problems of the Gifted Child in the Church

The gifted child in the traditional church school faces many problems peculiar to this relationship which arise out of certain characteristics inherent within himself, and characteristics inherent in the church. These would seem to be the most important:

1. The children are usually all lumped together according to age or grade in public school regardless of how long they may have been attending the church school, or any church school, or what kind of religious background they may have had, or how bright they are.

2. Curriculum materials are prepared

to meet the needs of such "average" classes. "Creative" handwork is more often than not merely busy work prepared by a religious publishing house or the teacher, and consists mostly of following directions. There is little opportunity for self expression.

3. Adding to this the generally accepted characteristics of the gifted child who learns rapidly and easily with less repitition, who reasons out more problems, and shows a high degree of creativity, we can see why the gifted child may become bored and frustrated. He resents teaching methods that consist largely of pouring out information, or routine direction following, or drill. Little wonder that he loses interest and may become a trouble-maker. The church may soon lose him.

4. Except in the most liberal churches stereotyped traditional creeds and doctrines are taught as the right answers to every question, even though many of them seem to contradict modern theories and facts of science and psychology. But the gifted child asks more questions and really wants to know the whys and wherefores for beliefs and doctrines. Serious questions fill his mind.

5. Most gifted children show a greater degree of interest in religion, and they show it earlier than those not gifted. Leta Hollingworth insisted that when a child reaches the Mental Age of about twelve rather than at puberty they begin to ask religious questions. She goes on to say, "The higher the I.Q. the earlier does the pressing need for an explanation of the universe occur; the sooner the demand for a concept of the origin and destiny of the self appear(6)."

Ruth Strang expresses much the same thought, and emphasizes the importance of helping gifted children find adequate answers to their questions early (7).

It should be quite apparent what this concept could do to the traditionally held position that the chronological age of twelve is the proper time for catechism, confirmation, and admittance to church membership.

SUMMARY

It would appear that it is the rare church that makes any attempt to meet the special needs of its gifted and bright children. But when it does the motivating factor comes from outside the church.

Because of poor records and the paucity of identification practices, no one really knows what percentage of the high drop-out rate of the average church school are bright and gifted children. However in the churches which are providing special programs for their gifted children, the drop-out rate is phenomenally low among those affected. Based on this and other observations and experiences, this writer is lead to believe that the casualty rate for bright and gifted children in the average church is exceedingly high.

The church begins its relationship with its gifted children with a tremendous advantage the gifted child's earlier and greater interest in religion. But the average church soon loses this advantage, and often loses the child. Walking out with him go uncounted numbers of leaders in every area of human endeavor. But most tragic of all, most churches do not know that this is happening.

REFERENCES

1. Hoppock, Anne S. *All Children Have Gifts.* Washington, D. C.: Association for Childhood Education International, 1957.
2. Hoover, J. Edgar. *Christianity Today.* 5 (October 24, 1960) 53-55 +.
3. Kemp, Charles F. *The Church: The Gifted and the Retarded Child.* St. Louis, Mo.: Bethany Press, 1957.
4. Lewis, Drayton W. *Journal of Genetic Psychology.* 20 (March 1947), 29-51.
5. Havinghurst, Robert J. *A Survey of Education for the Gifted,* Supplementary Monographs, No. 85, Chicago, Ill.: Chicago University Press, 1955.
6. Hollingworth, Leta. *Children above I.Q. 180 Stanford-Binet.* New York, N. Y.: World Book Company, 1942.
7. Strang, Ruth. *Helping Your Gifted Child.* New York, N. Y.: E. P. Dutton & Co. 1960.

THE NEEDY GIFTED BOOK PROJECT

Over the years the offices of the NAGC have received many letters from individuals, from all over the country, whose pleas sound a plaintive note. Frequently they say they are enclosing membership money which in truth they can ill afford, but they were gifted children and no one cared, so now:

"I sell newspapers.'
"I am a maid."
"I am the custodian of an apartment building."
"I am a truck driver on a bread route."
"I am a minor clerk."

Other communications from professors, business executives, artists, musicians received at NAGC Headquarters repeatedly indicate that they attribute their current success to the fact that some recognition was given them in their youth. This may have appeared incidental or accidental *But in Retrospect, They Feel it was the Turning Point in Their Personal Aspirations.* This recognition should not be left to chance. It is of deep importance that children be made to feel that someone cares about them enough to give some personal thought to them in an individual manner.

Coupled with these introspective insights are results of objective studies of large groups of gifted who were given scholarship opportunities in college. Repeatedly it has been found that only some of these students succeed in their academic work. One college survey of students involved over 175 freshmen who were getting scholarship aid. Close to half of this group did not go beyond the first year, many of this number dropped out before the semester was completed. *The Gifted too Need Encouragement.*

It would seem that in addition to mere opportunity, something more is needed if the student is to succeed. A number of researchers would agree that a definite factor in histories of some boys and girls who under-achieve is related to their poor self-concepts. The ideas which they hold about themselves and what they can or cannot do with their capacities during the course of their lives are contributing factors to their actual achievement.

This means that gifted boys and girls need to be reached and helped to gain insight into their potentialities at an early an age as possible, when their feelings about themselves might be regarded as still in the formative stages. Hopefully this would result in the setting of goals which are commensurate with their potential contributions to society, for the betterment of the world, as well as for their own personal sense of achievement.

The Needy Gifted Child Book Project was devised as a partial answer to the problem of how to fortify this child's positive self-concepts.

How the Project Works

Early in the school year (October), the administrative offices of the schools are contacted and informed of the co-sponsored NAGC project which gives recognition to underprivileged gifted elementary school-age children. The plan is to present a book in the field of the child's interest and ability. Recommended book lists are available from the NAGC Headquarters Offices. Children selected are honored in a public assembly at the end of the year. Care is taken to order books specifically related to the children's interests and aspirations so that it is clear to them the choice has not been a random one, but that someone cared enough to give considerable thought to them, their interests and abilities.

There is much evidence that we are each year losing many of our gifted boys and girls. Here is a concrete way in which schools can be helped to be on the lookout for them, organizations can provide encouragement, and the children themselves be further motivated to make something of their talents.

NATIONAL GIFTED CHILD WEEK
OCTOBER 22, 1961

To foster increased acceptance and appreciation of the gifted children that a general climate may be created bringing about a better understanding of their problems and needs.

They will thus be enabled to use their talents for their own self-fulfillment and the betterment of the world, bringing about the solution of its ills and the advancement of the existing cultural heritage, so that lasting world peace may become a reality.

The number of schools, especially at the elementary level, with well-organized, uniform, integrated and coordinated provisions for the gifted child are still remarkably few. For the most part programs appear to be sporadic and are still being disbanded at the whim of the person who is momentarily charged with their responsibility. In many communities even pilot studies have not been initiated. Supervisors have been so burdened with the pressures of their positions in general, that many admit the area of the gifted child to be one in which they have intended to look into but as yet have not had the opportunity.

These bits of insight are imparted to us from many sources. Sometimes supervisors themselves are cognizant of this situation. In other instances teachers are expressing a hungry desire for leadership in this area. Still another member of the school community who at times feels a lack here is the parent. All three groups communicate with us through the mail, as we address various meetings and as we teach courses on the gifted or fill the role of consultant at conferences.

It is not without sympathetic understanding that lack of provisions for the gifted are indicated. Even those vitally interested in the gifted must realize that charged with the full responsibility of a given department in some schools the need to focus on such a multiplicity of problems makes it questionable whether additional attention than that which a previous supervisor provided would be possible, sans much encouragement.

It thus behooves each of us who is especially concerned with the problems of the gifted to do our part in helping to observe NATIONAL GIFTED CHILD WEEK.

Plan to Attend the 9th Annual NAGC Convention
April 25-28, 1962, Chicago, Ill. (Tentatively)

Observe National Gifted Child Week, October 22, 1961

Become a Life Member in NAGC

HELP OBSERVE NATIONAL GIFTED CHILD WEEK IN YOUR COMMUNITY

These Things You May Wish to Do:

1. Start a local NAGC Chapter in your community.
2. Start a State NAGC Chapter in your state.
3. Take the preliminary steps that will launch the Needy Gifted Child Book Project.
4. Schedule a local meeting in your own town or city.
5. Arrange for an all day session in the state capital, on the campus of a university. Begin with a general session in the morning, invite a luncheon speaker, break up into interest groups, with leaders, for the afternoon, and possibly convene once more for a summary.

   Possible topics for speakers and programs:

   ADMINISTRATIVE PROVISIONS FOR THE GIFTED
   CURRENT RESEARCH ON THE GIFTED
   HELPFUL CUES FOR CLASSROOM TEACHERS OF THE GIFTED
   THE CREATIVELY GIFTED
   PARENTS OF THE GIFTED AND THOSE WHO WORK WITH THEM
   THE GIFTED ELEMENTARY SCHOOL CHILD
   THE GIFTED CHILD IN THE SECONDARY SCHOOL
   THE GIFTED CHILD IN ART
   THE GIFTED CHILD IN MUSIC
   THE GIFTED CHILD IN VERBAL SKILLS
   THE GIFTED CHILD IN SCIENCE
   A PANEL DISCUSSION OF GIFTED STUDENTS, WITH AN ADULT MODERATOR.

DURING THE SESSIONS:

6. Announce the annual NAGC Essay Contest.
7. Announce the coming National NAGC Convention — April 25-28, 1962.
8. Distribute available NAGC literature.
9. Be sure to have a registration fee which will cover your mailing costs, and packet of materials to be distributed, and luncheon.

These persons have already indicated to NAGC that there are plans in their communities to observe National Gifted Child Week:

Walter B. Barbe, Kent State University, Kent, Ohio.
Marjorie McDaniel, Indiana State Teachers College, Terre Haute, Indiana.
Carol Neu, President of Cincinnati Chapter NAGC.
William Vasser, Principal, William Cowing, Jr. High School, Springfield, Mass.
Marjorie Walters, The Marjorie Walters School for Gifted, New Orleans, La.
Charles Haggerty, Supervisor, Gifted Child Program, State Dept. of Education, Oregon.

Do Your Part to Help Call Attention to this Coming Date

NATIONAL GIFTED CHILD WEEK — OCTOBER 22, 1961

Suggestions for Forming and Operating a Local Chapter of the National Association for Gifted Children

1. All persons of local chapters must be members of NAGC. Ten persons may form a chapter.
2. Membership must be open to all persons regardless of race or creed whose interest in the gifted may be from the point of view of the layman or professional worker.
3. Local chapters forward a minimum of $25.00 annual group membership.
4. Local chapters hold at least one annual open meeting in their own community.
5. Local chapters prepare a report for NAGC headquarters, summarizing their activities for the year.
6. Local chapters appoint and help financially sponsor a delegate to attend the annual NAGC convention.
7. Local chapters encourage each school system to finance and sponsor at least one staff person's attendance at the annual NAGC meeting.
8. Local chapters are to support the activities for gifted in both public and private schools, surveying these biennially. In addition they are to help publicize in their own communities NAGC activities, The Annual Essay Contest, The Needy Gifted Child Book Project, and available publications.
9. Local chapters collect their local dues and that of NAGC setting their own minimum ($2.00-$3.00 is suggested) forwarding to NAGC headquarters a minimum of $5.00 per member.
10. Local chapters are to cooperate with their state chairmen in activities for National Gifted Child Week, October 22, 1961.

Additional activities which local chapters may wish to pursue must be in keeping with the By-laws of NAGC and receive approval of the NAGC Board.

Historically in some communities, good programs for the gifted have not spread. In others through no fault of their own, good programs have tended to fall by the wayside. In still others, some provisions have been made for the gifted which were ill advised to begin with, but which subsequently caused the community to look with disfavor on all provisions for the gifted. In addition, new research and the dynamic quality of American culture makes it essential that all programs be constantly evaluated and revised as needed. Local NAGC chapters can provide helpful vehicles to help attain the goal of vital programs for the gifted.

BOARD MEMBERS OF THE NATIONAL ASSOCIATION FOR GIFTED CHILDREN

Terms Begin Immediately Following Annual Meeting April, 1961

INCUMBENT

Walter Barbe, Head, Sp. Ed.
Kent State University
Kent, Ohio

Thomas S. Cohn, Prof.
Wayne State University
Detroit, Michigan

John Gardiner, Field Rep.
N.Y. State Teachers Assoc.
152 Washington Avenue
Albany, New York

Victor Goertzel, Psychologist
Fountain House
16 Prescot
Montclair, N. J.

Ann F. Isaacs, Exec. Dir.
N.A.G.C.
409 Clinton Springs Avenue
Cincinnati 17, Ohio

Helen Mayer, Parent
Wolf Pen Branch Road
Prospect, Kentucky

John Pearson, Psychologist
Mayo Clinic
201 First Street
Rochester, Minnesota

ELECTED FOR THREE YEARS

Richard Barbour, Chr. Guidance
San Diego Public Schools
San Diego, California

Leah Gold Fein, Consulting Psych.
16 Urban Place
Stamford, Conn.

John C. Gowan, Prof.
San Fernando State College
Northridge, California

Jack Kough, Vice President
Science Research Associates
259 Erie Avenue
Chicago, Illinois

Arthur Hugheson, Assistant Superintendent
Board of Education, City of New York
72 Veronica Place
Brooklyn 26, New York

Milton Saslaw, M.D., Dir. Medical Research
National Children's Cardiac Hospital
8920 N. W. 51st Street
Miami 55, Florida

ELECTED FOR TWO YEARS

Herbert Coon, Principal
University School
Ohio State University
Columbus 10, Ohio

William K. Durr, Assoc. Prof.
Michigan State University
E. Lansing, Michigan

Benjamin Fine, Education Editor
N. American Newspaper Alliance
375 Browers Avenue
Rockville Center, New York

Gladys Grimjes, Gifted Child Consultant
Fort Dodge Public Schools
Warden Apartments
Fort Dodge, Iowa

Mary E. Karraker, Dir., The Dr. Mary E. Karraker Speech and Hearing Center
900 Southland
Fort Worth, Texas

William G. Vassar, Principal
William Cowing Jr. High School
156 Nelson Street
W. Springfield, Mass.

Virgil Ward, Assoc. Professor
University of Virginia
Charlottesville, Virginia

ELECTED FOR ONE YEAR

Doris T. Allen, Psychologist
Pres., Children's Inter'l Summer Village
30 W. Fountain, Glendale, Ohio

Violet Balastra, Ass't Principal
Shroder Junior High School
3500 Lumford Place
Cincinnati 13, Ohio

Albert Fingerman, Parent, Attorney
1433 Yarmouth Avenue
Cincinnati, Ohio

Gail Parsons, Teacher, Science
Laboratory School, Indiana University
F 123 Hoosier Courts
Bloomington, Indiana

Ann Stiles, Parent
75 Andover
Dumont, New Jersey

(Continued on page 64)

SCIENCE AND ART CAMPS

If your community wishes to participate in the SAAC project, beginning in 1962, have your Superintendent of Schools communicate with SAAC, P.O. Box 360, Greenwich, Connecticut. It takes over ten months of planning before a SAAC day camp unit, culling qualified campers from several adjacent towns, can be organized successfully.

NATIONAL ASSOCIATION FOR GIFTED CHILDREN COMMITTEES FOR 1961

Names in italics are Chairmen

1. PROGRAM: *Gardiner,* Barbour, Allen, Ward, Hugheson
2. CONVENTION: *Durr,* Gardiner, *Barbe*
3. PUBLICITY: *Vassar,* Barbour, Young, Gowan, Balastra, Pritchard
4. CONSTITUTION: *Hugheson,* McDaniel
5. STATE COMMITTEES: *Porter,* Fein, Coon, Vassar, Haggerty
6. NOMINATIONS AND ELECTION: *Barbe,* Laycock, Keeney
7. ANNUAL ESSAY CONTEST: *Manthey,* Barbour, Saslaw
8. LAISON WITH OTHER ORGANIZATIONS: *Ward,* Gowan, Allen, Durr, Fein
9. MEMBERSHIP: *Griffin,* Porter, Grimjes, Lang, Cobb, Laycock, Fein
10. PUBLICATIONS: *Durr,* Cohn, Gowan
11. PARENTS OF GIFTED: *Barbour,* Coon, Karraker, Stiles, Mayer, Fingerman, Saslaw
12. ANNUAL COLLEGE SURVEY: *Saslaw,* Gowan, Porter
13. LIVING ENDOWMENT AND LIFE MEMBERSHIP: *Fine,* Kough, Vassar, Gowan
14. TEACHERS OF GIFTED: *Kough,* Hugheson, Durr, Fein, Karraker, Coon, Saslaw, Parsons, *Keeney*
15. TRAVELING BOOK EXHIBIT: *Gardiner,* DeGrace
16. NATIONAL GIFTED CHILD WEEK: *Cohn,* Barbour: Every NAGC member
17. RESEARCH: *Gowan,* Ward
18. CITATIONS OF MERIT: *Pearson,* Hugheson, Kough
19. RESOLUTIONS COMMITTEE: *Isaacs,* Hugheson, Cohn, Porter, Fein

THE FOLLOWING LETTER WAS MAILED TO NAGC BOARD AND COMMITTEE MEMBERS:

Dear Fellow NAGC Members:

It is with the greatest of pleasure that we welcome you to the NAGC Board. Those who indicated preferences will find yourselves on one or more committees of your choice. Where no choices were indicated, or in the areas for which there were no volunteers, some arbitrary assignments have been made. Please bear with us and we are sure you will find your work interesting and rewarding.

Chairmen and Co-Chairmen of committees (italicized names) will be pleased to note that some persons not board members are serving on their committees. These individuals have kindly offered to be of help to NAGC.

Every other month or so, it is requested that you forward duplicate progress reports. One for this office, the other for the President. I in turn will strive to keep in closer touch with the Board. Periodic letters will be reaching you, at times requesting, at times providing suggestions and recommendations.

I should like to hear from you immediately on two items. They have to do with the celebration of National Gifted Child Week and the teaching of courses on the gifted, Summer, 1962. Please complete the form below.

May your term on the Board be a memorable one resulting in growth for you personally as well as for NAGC.

Most cordially,

ANN F. ISAACS, *Executive Director*

CLIP AND RETURN

---

1. I am available for conducting ..... Courses ..... Workshops on the Gifted, the Summer of 1962. (Please enclose your background.)
2. I will help celebrate National Gifted Child Week in my state and community. I plan to help arrange open NAGC meetings ..... Morning, ... Luncheon, ... Afternoon, ... Evening, Saturday, October 28, 1961.

(If an all day session does not seem possible scheduled on the campus of your local university, please try to arrange at least one session. By June 1, please let us know your arrangements regarding speakers and a meeting place.)

ALL NAGC MEMBERS, READERS AND FRIENDS ARE URGED TO COMPLETE THE ABOVE FORM AND MAIL TO NAGC, 409 CLINTON SPRINGS AVENUE, CINCINNATI 17, OHIO.

THE SIX PAPERS AND ABSTRACTS WHICH FOLLOW WERE PRESENTED AT THE NAGC EIGHTH ANNUAL MEETING IN NEW YORK CITY, APRIL, 1961

NURTURING THE CREATIVE RESPONSE

A Frame of Reference Pertaining to Some of the Factors that are associated with Creativity

Bert O. Keeney with Denmar A. Cope

IT SEEMS apparent that great divergence in the concept of creativity occurs even among artists, scientists, teachers, and people in all walks of life who consider themselves to be creative. If it is assumed that a more significant human response may be effected by awareness of the factors that are involved in making it, then it stands to reason that greater likelihood of creativity will exist if an individual thinks through the implications of such a response and has a knowledge of the personal integration, the environmental organization and an optimum work procedure for the kind of thing he is attempting to do.

Indeed, one might assume that in order to sense the validity of the work one is doing, it is imperative that he have this understanding of himself. Would it not be reasonable to regard this awareness as the essential basis for personality growth and commitment to the value system that he holds?

One encounters the assumption that true education will transfer from one situation to another; that the more one creates the better able he is to create; that the more one does his own thinking the better he can think; that laying the basis for a continuing self-education is the opportunity and obligation of the learning situations that are set up by people who profess to be teachers. If this be true, it seems feasible to outline a frame of reference which is pertinent to the factors that are involved.

The inventory is directed specifically toward creativity in the field of visual art. It may be, however, that the implications have a quite general application.

It is assumed that one of the essential elements of personal growth is the opportunity to make judgments. Further, that making judgments and developing the awareness of making them, as well as sensing their validity and having the confidence to form an action pattern utilizing them, is the basis of independent thinking and action. There is danger of making false assumptions and mistaking independent action at a superficial or false level as being significant. Greater awareness of significance can be accomplished through contrast of alternatives.

It is at this point that the creative person proves himself to himself and to others. At this point he becomes aware of sympathetic relationships and workable combinations of materials and functions that he did not previously know existed.

He does this, however, by critical selection of alternatives and consciously surveying and evaluating the combination that is used. This is the point of synthesis but it seems reasonable to assume that before true significance can be attributed to the "expression" that has been made, its creator has satisfied himself of its validity through conscious selection and evaluation.

In order to develop clarity concerning the specific intent of the inventory which follows it will be well to distinguish two kinds of problem solving. There can be

DENMAR COPE is Assistant to the President, BERT KEENEY is Associate Professor, Art, Kansas State College of Pittsburg, Kansas.

no doubt that much of the educational concern is with the solution of problems that have known answers. While some parts of many unique problems may entail some previous solutions, there have to be some elements that demand subjective judgments or the problem would not be unique. It is felt that the visual arts are important because they usually employ a higher percentage of subjective judgments than many other areas. These kinds of judgments are entirely dependent on the past experience of the individual making them and the value system that he holds. The solution demands independent action and decision. If a new combination of relationships occurs that produces an organically unified and socially significant object, we treat it as being a new creation and believe that the items that follow may have functioned in the process of its development. We think it would have been helpful to the individual who created this hypothetical object to have considered the implications of the following questions and statements.

AN INVENTORY FOR THOSE CREATIVE IN THE VISUAL ARTS

I. The Personal Factors

1. Do you have confidence in your ability to adjust easily to new situations?

A creative response demands willing adjustment to new concepts and ideas. This must be nurtured and developed. If you are not aware of this quality in yourself, it is probable that you need to consciously develop it. It can be acquired by deliberately seeking out new experiences and situations. Continued exposure will develop ease of adjustment.

2. Do you hesitate to question the established procedure of doing things?

An established procedure is justified only by the service it renders to society and has no meaning apart from satisfying vital needs. One should try to understand how it was derived and the contributions it makes but not to feel that it is infallible or that some other method of response should not be tried. Since the act of creation requires going against or beyond the established order of things, hesitancy or inability to question established procedures implies unwillingness or inability to create.

3. Are you aware of the frequent origin of new ideas and a desire on your part to do something about them?

If the new ideas are foreign to you, then it is possible that lethargy and status quo conformity characterize your response pattern. Undoubtedly you have had them, but refuse them consideration when they open up new avenues which seem not to bear directly on the practical routine of existence.

4. Are you willing to tolerate indecision and confusion in the development of your idea?

If no indecision occurs your personality growth probably has not increased. You are possibly not at the point of understanding how the creative person has to work. You are sure to meet failure at times and must find the courage to try again in order to refine the clarity of your thinking and your responses.

5. Do you have the courage to carry out a concept which as far as you know has not been explored before?

Our adjustments to daily living seem to produce a fear of the unexplored and unknown. If fear of failure and uncertainty prompts you to follow the beaten path, a successful creative response is unlikely.

6. Do you feel that you are basically an honest person and that you have personal integrity?

It is so easy to delude ourselves with escapist tendencies. The concept of gaining credit and participation in comfortable achievement patterns can become a disease. This is all the more insidious because we are not aware that we may

suffer from it. We must recognize the continuous necessity of new concepts to augment or supplant our present values and understanding of truth. Every individual must start from where he is and assume responsibility for meeting the new and unexpected if he considers himself to be creative.

7. Are the decisions you make based on your own thinking?

Do you depend upon source material both to initiate your concept and to make adjustments as it develops? Use of such material is not necessarily bad, but utter dependence on it will not produce what you are seeking. Unless you can get beyond the established system, your response will not be creative. Creativity is discovery of new and sympathetic relationships. This discovery must be your own and recognition of this is essential to creative growth.

8. Do you search for an inclusive order of all of the elements of your idea?

If a creativity means a discovery of likeness and related quality between elements that you did not previously know existed, it follows that until some of these likenesses become significant to you, there is no possibility of an adequate creative response.

9. Are you aware of the relative significance of subject matter with which you may seek to satisfy your creative need?

While many new ideas may evoke a creative response, inability to differentiate between ideas of differing relative merit can result in failure to evoke a significant creative response. Creativity means sustained effort and is characterized by change in a new and vital direction.

10. Do you feel that you have an understanding of the meaning of significant expression as it applies to the visual arts?

Unless you can work beyond the conventionalized signs that are commonly used to suggest categories of human experience to a unique quality that can only apply to your own concept, its validity and significance may be nil. The exciting elements of your idea may not seem clear at first.

11. Are you confident that the more you create the better you will become at it?

When you fail to follow through on a promising idea it means more than this individual loss, it actually restricts the fulfillment of future purposes. You become proficient in developing ideas by using the ones you now possess to their limit.

12. Do you sense the importance of contemplation and reverie to the point of patiently cultivating them?

Perhaps you are not aware that a new idea demands that you operate on the fringes of your conscious thinking and that some confusion is bound to occur in making the adjustments. Try not to be too impatient. Your calculations can help organize things in view, but they cannot organize elements that have not yet been discovered.

13. Are you conscious of your development in sensitivity?

It again is a matter of sympathetic likenesses that can be recognized in the forms that you use for expression. You should be increasingly aware of relationships between and within the physical world and society. If confusion and inappropriateness in these relationships do not bother you, it is probable that growth in sensitivity is not taking place.

14. Are you aware of your progress in independence of thinking and creative power?

It is unlikely that you will work as hard, or make the sacrifices necessary to work on some other person's idea, that you will for one of your own. If you can be given directions, the answers are in and the problem may be largely stereotype before you start. Since our desires

come from unrealized elements in life it is likely that your idea will be generated indirectly.

15. Do your efforts at creativity produce changes in your viewpoints and the things you hold to be important?

A truly creative response requires deep personal involvement. Such involvement cannot avoid confronting the individual with critical decisions which require re-evaluation of personal beliefs. Such re-evaluations inevitably produce changes in the individual. The significance of a creative response can be measured by the intensity of its impact upon the person involved.

16. Was your idea clearly enough defined that you could distinguish success from failure in the final result?

It is possible to find escape in evocative type problems and tend to shun the discipline and hard work that significant art requires. Your idea, once crystallized, must be shaped consciously and rationally. This is the concept of planning. One should remember that responses should consider life needs.

II. The Environmental Factors

1. Does your work schedule permit enough time for imaginative solutions to occur?

Short work periods usually result in mediocrity and lack of personality integration on your part. You must do the best you can to arrange longer periods at strategic points in the development of your idea.

2. Do you have equipment and materials available that are adequate to your purpose?

Inadequacy of available materials may give rise to a situation in which a response cannot be carried out in its natural medium.

3. Is personal integration possible in your immediate environment?

Are there so many outside pressures, demands for your attention, and outside distractions as to preclude the possibility of your ever coming to grips with or even recognizing the true nature of your problem?

4. Are you working under a system that permits innovation and freedom of action?

Imposition by a person of authority can make it very difficult to develop a significant problem of your own.

5. Is your environmental climate conducive to exciting events and the kind of stimulation which nurtures creativity?

Dull routine and insistence on meeting specific requirements can thwart your commitment to significant work.

6. Are your associates energetic enough to attempt innovations that help stimulate your thinking and enthusiasm?

Comfort, repetition of mundane exercises, or satisfying minimum requirements characterize the work aims of some groups. Such a climate can create a handicap which must be recognized before it can be overcome.

7. Do you receive group approval for your efforts to innovate and create?

If you are under pressure to conform to group standards of expression, it is likely that your group does not have a frame of reference which is adequate to evaluate validity of creative response. It is possible to be creative under such circumstances, but you must be prepared to accept group disapproval.

8. Are your associates energetic and active to the point of providing serious competition for relative achievement?

While the actual role of competition in evoking a creative response is with one's self, it is quite possible for active and even bitter competition from one's associates to fulfill the same function that group approval may do for your efforts to innovate and create.

9. Do you have opportunity to compare your creative responses with those of acknowledged masters in your field?

One can operate in such a narrow scope that the true significance of broad areas of human achievement are not truly meaningful to him. The creative impulse goes beyond novelty. You must be thinking in terms of specific materials and after a while the specific end result must be clear to you. Depth of significance can become apparent through comparison.

III. Factors that Nurture the Creative Response

1. Are you aware of what is required to get a creative idea to develop?

You rarely see the whole thing at first, nor does it come from deliberate thinking. The crystallization may be delayed for a long time. You can arrest further development of an idea by giving increased attention to details that you already possess. You must learn to culminate the creative response at the optimum time. You must also examine critically the factors and conditions which implement or detract from the development of your idea.

2. Can you distinguish symbolic expression of vital experience from a stereotype?

If you have not had to make critical decisions in the development of your idea it is probably a stereotype. No matter how meager or unpromising your first thoughts about the idea may seem, they have to be considered. It is from this material that new ideas are developed. You can assess your work on the basis of its helping to organize experience in a fresh and useful way. You will have recognized curiosity and inventiveness and an intense feeling of excitement.

3. Are you able to recognize and eliminate irrelevant and superfluous elements from your work?

You must guard against the danger of unconsciously assuming that anything which fills space contributes to significant expression. Failure to do so may result in the use of materials and inclusion of elements which detract from validity of expression rather than contribute to it. Exercises in the formal elements of design are important but should not be solely depended upon to produce a valid creative response with symbolic communication.

4. Are you conscious of the implications of the specific characteristics of your perception of environmental stimuli to your creative effort?

It is possible that motivation for creative work can be entirely wrong for some individuals. The strongly visual person may not be able to accept tactile and emotionally oriented stimulation for a visual art response. The person of highly subjective perception can be frustrated by being forced into close visual representation.

5. Are you aware of the relationship between your concept and a medium of expression?

All of your ideas may not lend themselves to expression through a medium in which you are adept. Unless you are aware that choices may have to be made between rejecting a new idea or becoming adept in a new medium, your efforts to creative response may face an insurmountable handicap. An adequate learning situation should give familiarity with different media of expression as well as an opportunity for you to assess the appropriateness of each to expressive need.

6. Do you feel that experimentation with materials is a profitable experience to you?

Anyone can experiment with materials. There is little or no growth unless something of significance accrues from this activity. There seems to be a universal need for some hidden organic development at certain stages of the creative process. You can hope to gain insight into significant relationships through

manipulation of materials, but this is only a means, or a suggestion of means to something of importance.

7. Can you adjust technical procedure to meet your need of expression?

You may not have confidence in experimentation and innovation. The idea that each concept demands its own technique may not be meaningful to you at this time. It takes a period of development before you sense spontaneity in the use of the different art media. One of the great advantages of the visual arts is the adaptability of the techniques used. Some represent more of a discipline than others. It is most likely that some media is available with simple enough technique to afford you a measure of success. What if you do fail? Generally not too much is at stake and you are bound to learn something.

8. Do you believe that each idea or need for expression that you have demands the same level of abstraction?

This is a delicate matter, but is it not likely that complete adherence to any given level of abstraction can result in sterile stereotypes? There are instances where vigorous creative minds have dropped certain areas of investigation when the less inventive begin to use it and to go on to something new.

9. Do you understand the difference of procedure in attacking problems where, given the same data, everyone should come out with approximately the same answer and those of an intensely personal nature which can only result in unique solutions that are based on your own past experience and value system?

Ordinarily, teaching is thought of as organization of material, and where the answer is known this can be done in a highly efficient manner. In the case of the unique solution one may not really know the nature of the problem until a series of trial and error responses have been made and the solution is based on continuous adjustment, strategic decisions, and elimination of confusion and unrelated elements. It is a matter of discovery and excitement. Success often hangs in narrow balance. It is a demanding and often a desolate area to travel in.

If it is assumed that a changing society demands commitment to flexibility and resourcefulness on the part of its citizens, then freedom to make these adjustments without imposition is essential. Creativity cannot be imposed and our schools should be concerned with the quality of the situations that nurture it. Development of this kind does not occur in organized exploration of the stereotype. That is, independently derived principles are more transferable than those which are given. Is it not likely that the larger awareness afforded by the inventory may aid in developing familiarity with the kind of situations which have important expressive implications?

Perhaps by this means we can develop an attitude of willingness to explore for similarities to previously experienced events and to search for the characteristics which are unique. The awareness that the problem of expression is similar to some things and not similar to others is essential. It is at this point that significant creative development takes place, and it is our conviction that this awareness will transfer from one situation to another and to personality growth.

SOURCES OF MOTIVATION IN CREATIVELY GIFTED ADULTS

Ann F. Isaacs

Abstract of Preliminary Report
Based on Interviews with Seventy-eight Gifted Persons
in the Fields of Art, Music and Literature

STUDENTS interested in the gifted are in some instances beginning to identify special areas of concern. While some continue to focus on the problems of the gifted in general, others see the problems of underachievement as requiring urgent solution. Still others are looking to the research on creativity as the area which will provide the most profitable insights to better programs for encouraging the gifted.

A question which has long perplexed researchers in quest of solutions to problems of the gifted has been that of underachievement. An increasing body of literature points to the fact that underachievement is derived from a great variety of sources. Briefly they have been characterized as bearing some relationship to the child's self-concepts and the various environmental vectors both endogenous and exogenous to which the child must learn to adjust.

A topic cutting across all three areas, giftedness in general, underachievement, and creativity, is that of motivation, and more specifically lack of motivation. Repeatedly research evidence is encountered substantiating the speculative assumption that lack of motivation is a cause of underachievement.

These facts, however, in themselves provide little of concrete value to those working with the gifted. Analysis of problems may provide some insight into contributing factors relating to lack of motivation. However, as a source of desirable recommendations for those charged with the responsibility of guiding the gifted, there is little merit here.

In an effort to discover some positive guidelines, it was felt the antithesis of studying the non-productive might prove fruitful, were it possible to pinpoint sources of motivation in gifted achieving adults. To explore this hypothesis a questionnaire was devised covering a number of topics, which was presented to the gifted persons of this study.

SUBJECTS

The subjects were seventy-eight persons in three fields of creative endeavor: art, musical composition and literary skills.

CRITERIA OF SELECTION

Each individual was chosen on the merit of his work as determined by the qualifying factors which follow. Composers were interviewed whose works were performed by a major symphony orchestra. Authors in this sampling had published works to their credit. Artists of this study had achieved recognition through the fact that a public exhibition of their works had been held.

The ages of the seventy-eight (twenty-six in each group) subjects ranged from thirty to sixty with forty-two the mean age. Some thought was given to include equal numbers of each sex. However, there were only eleven women in the three groups.

A variety of responses were given to the question seeking to determine what person influenced them through the most encouragement. Answers in order of frequency given were: parents, teachers, classmates, grandparents, uncles and aunts, neighbors, husbands and wives, psychologists and themselves.

ANN F. ISAACS is Executive Director of The National Association for Gifted Children and Editor of *The Gifted Child Quarterly.*

Age of Insight

The ages at which these gifted individuals first became interested in their fields varied from five to twenty-two for the artists, four to twenty-three for the composers and twelve to forty for the writers. In the sampling of talented persons it would appear that those gifted in verbal skills became initially interested in their careers at later ages than artists and musicians. The age of career selection ranged from four to forty for artists, four to twenty-three for musicians and twelve to forty for writers.

Instrumental Events

In response to the question of what events in their lives had helped to shape their careers, the following were included: the war, high school and college newspapers, city papers, musical productions, scholarships, inherent desire and drive, the winning of contests, awards and citations of merit.

Obstacles

Asked what obstacles had been overcome or had impeded their progress, some stated they could in all sincerity not refer to any of the events in their careers as obstacles. Others indicated that inadequate time, too little pay, the lack of acceptance by the public, the inference that they were "one sided-long hairs," and army careers had presented problems to them.

Summary

Gifted adults in the fields of art, music and literature were interviewed in order to determine their sources of motivation. The ages of initial insight into their talent ranged from four for early bloomers, to forty for late starters. Events which influenced their lives included various forms of public recognition coupled with inherent drive and desire. Obstacles in their careers included inadequate time, financial difficulties and lack of public acceptance. Individuals who were instrumental in providing greatest inspiration and encouragement for this group were the following in order of frequency: parents, teachers, classmates, grandparents, uncles and aunts, neighbors, husbands and wives and psychologists. Some members of this group emphasized motivation came from within themselves, no outside individuals appeared to be credited.

IN PENNSYLVANIA

Under a grant from The W. A. Mellon Trust and The Willa Cather Fund, Dr. Alan R. Blackmer, Dean of Phillips Academy of Andover Mass., the Pittsburgh Public Schools will be evaluating their programs for the talented.

NAGC COMMITTEE MEMBERS (Continued from page 55)

THOUGH NOT BOARD MEMBERS, HAVE GRACIOUSLY VOLUNTEERED THEIR SERVICES

Mrs. Lillian Cobb
65 Ivy
Port Washington, New York

W. J. DeGrace
1101 Parkview Avenue
Lorain, Ohio

Aileen Griffen
3700 Ross Avenue
Dallas, Texas

C. P. Haggerty
1271 Monmouth Street
Independence, Oregon

Joy Manthey
3842 Kilbourne Avenue
Cincinnati, Ohio

Charles J. Lang
2002 W. View Street
Los Angeles, Calif.

Marjorie McDaniel
637 N. Seventh
Terre Haute, Indiana

Arthur H. Young
22 Bailey Place
New Rochelle, New York

Bert Keeney
Kansas State College of Pittsburg
Pittsburg, Kansas

Robert Porter, Prof.
College of Education
State University
Oneonta, N. Y.

Antoinette Pritchard
113 Woodsdale
Pittsburgh 37, Pa.

HUNTER COLLEGE HIGH SCHOOL

Mildred T. Lawton

HUNTER COLLEGE HIGH SCHOOL is the campus secondary school of Hunter College of the City University of New York. It is a six year school, controlled by the Board of Higher Education, and serves two purposes. It is a college preparatory school for intellectually gifted girls and a laboratory school for the Department of Education of the College.

Admission, by competitive examination in English and mathematics, is possible at three levels, seventh, ninth or tenth year. To be eligible to take these examinations a student must fulfill four requirements: (1) citizenship, as required by the by-laws of the College; (2) residence in any borough of Greater New York; (3) I. Q. of 130 or better; (4) recommendation by her school principal. The tests are difficult; students with lower I. Q.'s are not likely to do well on them. And if they do, they may find the course of study at the High School too rigorous. Increasingly, we are trying to make our entrance examinations the kind that do not test only acquired skills, factual knowledge, or rote learning. The English examination tests vocabulary and comprehension—ability to read intelligently and with discernment. Our mathematics test is designed to spot students who can reason well in novel situations.

There is no "passing grade", although a student with less than 65 is automatically out of the running. We take the top students from all who apply. This past January, 3000 qualified and took the entrance examinations; 550 were accepted. There is a waiting list that may be drawn upon if some of the students who were accepted decide to withdraw next September. Our planned enrollment for next semester is 1250, although at present we have about 1100 students.

Hunter College High School is not dedicated to the development of one group of specialists — mathematicians, scientists, artists, musicians, or actors. Its students have talents that are many and varied. Some do specialize in the fields just mentioned. Others excel in creative writing or languages. Training for civic and social leadership is provided by a rich and unusual extra-curricular program.

Our course of study is an enriched one, sufficiently flexible to provide for individual interests and abilities, while preparing each student for college. Every student's program is planned to insure experience in the humanities and the sciences, and to provide basic experience in the fine arts. There are health and physical education courses in all grades; speech is a separate course of one or more periods every term. Students with speech defects are required to spend additional hours in the speech clinics, so that the defect may be overcome by graduation time.

Every student fulfills the requirements for a state academic diploma and for admission to the municipal colleges, and supplements this minimum with courses from areas of individual specialization or preference. Our requirements in terms of credits for graduation are more exacting than the admission requirements of most colleges.

As part of the extra-curricular program, we have thirty or more clubs—departmental, social, religious, social welfare, and at least slightly political. We are proud of our publications, the literary magazine, the school newspaper, senior yearbook, and language publications, which consistently win recognition by the Columbia Scholastic Press Association. Our active athletic association conducts some after-school activity every day—ping-pong, volley ball, basketball, swimming, etc. (Our eighth grade students

DR. LAWTON is on the staff of Hunter College High School.

all learn to swim, that being the physical education course at that level. We are fortunate in being allowed the use of the College pool certain hours of the week.) There is an annual Play Day indoors in the winter and a yearly Field Day in Central Park, both inter-class competitive activities. We have a cheering squad which leads the cheering for Stuyvesant High School, an all boys' school, at its football games and other inter-school activities.

The G. O. is a remarkable organization, offering leadership opportunities to many students, not only as the elected officers of the school and class representatives, but as committee members of the numerous functions run by the G. O. There are several dances a year, evening ones with a boys' school for the older girls, afternoon ones for ninth graders. We have had square dances in the afternoon for the junior high students. Often the P. T. A. sponsors this, and pays for a professional caller.

All students are invited to attend the G. O. meetings, which are held on Friday afternoons; and a great many do. These meetings are like "town meetings", with free and enthusiastic discussion of issues.

We have a Big Sister organization and a school honor society, known as "Sigma", which is also a service organization. Members of Sigma render many types of service about the school; most noteworthy, perhaps, in the coaching it does of students who are having difficulty with some subject.

Almost every graduate of Hunter High will tell you "there is no place like Hunter", and will recall nostalgically the spirit of friendliness that exists between teachers and pupils, who work, play, and learn together. Our yearly G. O. Carnival, a fund-raising activity, always has a Big Show, the biggest attraction of which is the faculty show. Although the faculty show is usually thrown together in a few short days, with fewer rehearsals, and cannot compete with the traditional original senior show in some respects, the students would be bereft without it. We also have a student-faculty volley ball game on Carnival day and a soft ball game between teachers and students on Field Day.

We sponsor many trips, such as an all-school visit to Stratford, Connecticut to see a Shakespearean play, science trips to Brookhaven, Long Island and to the Museum of Natural History. The seventh-grade core group (social studies, English, guidance) always have an excursion boat ride around Manhattan Island and trips that teach them more about their city. Each spring semester, thirty seniors go to Washington, D. C., on a four day study trip. There they meet with a couple of senators, congressmen, a Supreme Court Justice, speaker of the House, and a cabinet member (and possibly other officials) in the private offices of these individuals to talk about the phase of government in which each is engaged. Evenings are spent in listening to speakers who are experts on some questions in foreign affairs. These lectures are followed by enthusiastic question and answer periods.

At present, a student may specialize to the extent of taking four or even five years of her special interest subject in the usual four years of high school. This is possible because of our special courses where the work is both accelerated and enriched, leading to advanced placement courses in the senior year—in just about every area. Students begin the study of a foreign language in the seventh grade, with Latin, Greek, French, Spanish, German, and Russian to choose from.

And yet, we are not satisfied or complacent. We are continually revising the curriculum, making changes which we hope are improvements. For, we at Hunter High are aware of the privilege and responsibility accorded us in working with our type of student. If, at some future date, our school should become co-educational, we hope to meet that challenge with the same enthusiasm.

THE HIGH SCHOOL OF MUSIC AND ART, NEW YORK CITY

Louis K. Wechsler

THE High School of Music and Art was organized in 1936 by Associate Superintendent Frederic Ernst and Mayor Fiorello H. LaGuardia to give New York City boys and girls talented in music or art a complete college-preparatory education, together with an opportunity to develop their special abilities for either professional or cultural purposes. Mr. Ernst provided the professional leadership; Mr. LaGuardia his dynamic support and encouragement.

The school admits by competitive entrance examinations students from eight-year elementary schools or junior high schools residing in any of the five boroughs of the city; the entrance examinations tests native talent rather than achievement based on previous training. About 20% of those admitted come from so-called "special-service" public schools, i.e. schools with a great many problems arising from socio-economic factors. The school has a register of about 2,000 students, half of whom major in music and half in art.

The program of the school includes the regular college-preparatory course of study of the New York City High schools in English, social studies, mathematics, science, and foreign language. In addition, each student follows a required course in either music or art for two or three periods daily throughout his career in the school. Over 95% of the graduates go on to college or professional school.

The required course of study in music includes, in addition to theory, group instruction in piano for those who have not studied the piano prior to admission; instruction in a second instrument for those who have studied the piano; music history; and participation in ensemble, symphony, or symphonic band groups or in choral ensembles and production of choral works. The elective courses cover composition, conducting, band arrangement, chamber music, string ensemble, harp, and organ.

The required course of study in art includes a basic course in fundamentals of drawing, painting, design, and composition through the media of pencil, pen and ink, crayon, tempera, water color, and oil paint and in fundamentals of three-dimensional design through the use of paper, textured material, metal and clay; and art history. The elective courses include architecture, advanced painting, textile design and costume illustration, graphic arts, illustration, advertising arts, ceramics, and sculpture.

The education of the students has been enriched by demonstrations and lectures by more than 200 of America's foremost figures in the fields of art and music. Some of the guest teachers in art: Kuniyoshi, Marsh, Weber, Zorach, Hoffman, Manship, deCreeft, Kahn, Jewell, and Craven; in music: Stokowski, Koussevitzky, Bernstein, Copland, Chasins, Serkin, Chotzinoff, and Erskine. A host of special school activities—newspaper, magazine, dramatics, sports, clubs, and participation in a great variety of contests offer the students further opportunities to develop individual interests.

The school takes part in the Advanced College Placement Program, the National Merit Scholarship Competition, science competitions like the Westinghouse, and outside music programs and art exhibitions. Last year, for example, Leonard Bernstein and the Philharmonic Orchestra presented Aaron Copland's play opera, "The Second Hurricance," with the sen-

LOUIS K. WECHSLER is Principal of the High School for Music and Art, New York, N. Y.

ior chorus and vocal soloists of the school, and the U.S. Office of Information sponsored a travelling exhibit abroad of student art work, musical programs and publications.

The effect of this broad and stimulating program is to be seen in the distinction which the graduates of the school have already achieved in college and life in the short span of twenty years—not only in art and music, but also in the other professions and in business and industry. Among those recognized in the music world are such figures as Violinist Joyce Flissler, Singer Diahann Carroll, and Composer Meyer Kupferman; in the art world, Arthur Drexler, Director of Architecture at the Modern Museum of Art, and Artists Pollack, Kirschenbaum, and Kabak.

The school has demonstrated the importance of creating a favorable environment for talented young people, especially those who possess talents that are somewhat neglected or lack prestige value in society. Not only does the talent flourish in such an environment, but other abilities are stimulated and the total personality is developed. The death, as Milton observed, that comes from hiding a talent is often prevented.

Shortly before he left City Hall, Mayor LaGuardia said, "The founding of the High School of Music and Art is the most hopeful accomplishment of my administration." With plans being prepared by the New York City Board of Education to merge the High School of Music and Art and the School of Performing Arts so as to provide special education for those students who are talented in art, music, dance, and theater art, and to place the combined school under one roof and administration in the new Lincoln Center now being built as a home for the musical and theatrical life and education of the city, his words take on the accent of prophecy, and promise a future of even greater and wider significance to the community and the world.

NOTES AND NEWS

IN CALIFORNIA

The newly formed Academy of Achievement, Monterey, California, with Hy Peskin as Executive Director, will hold its first Annual Banquet of Golden Plate Awards during the week end of September 8-10, 1961. Fifty men and women of achievement from all walks of life will be honored.

IN OHIO

At Cincinnati Country Day School, under the direction of William R. Deane, enrichment courses, not designed for remediation, not providing, credit but merely broadening experiences of the gifted, are being offered. The following subjects are available: English workshop, languages—French, German; Mathematics; Science; Study Techniques (covering shorthand, and how to study). These courses are being offered to High school children, five days a week, five weeks ($50.00). Interested persons are invited to contact the school 6905 Given Rd., Cincinnati, 43, Ohio.

WORKSHOPS AND SUMMER COURSES

Persons who are interested in finding workshops on the Education and Psychology of the Gifted may yet find worshops available this summer at times which are convenient for them.

Please see the Vol. V, No. 1 for major listings. The following courses have been called to our attention as also available.

June 15—July 14, Centenary College, La., R. McCurdy, "Teaching the Gifted, Education of the Mentally Advanced and Talented."

June 26—Aug. 4, The University of Pittsburgh, Pa., Jack Birch and staff, "Demonstration Classes."

A PROGRAM FOR THE GIFTED AT THE BRONX HIGH SCHOOL OF SCIENCE

Alexander Taffel

Background of the School

The Bronx High School of Science was established in 1938 by the Board of Education as a special school for students with particular interest and potential in the fields of science and mathematics. It selects its students from all parts of New York City by means of an entrance examination and an evaluation of record. In this manner, it chooses from approximately 4000 candidates who apply yearly an entering class of 900 students having a median IQ of 135, arithmetic and reading scores two years ahead of age level, and an impressive record of previous achievement. The register of the school consists of about 1900 boys and 900 girls.

Philosophy of the School

Although the school is specially equipped to develop student interest in science and mathematics, its primary purpose is to give the student a well-rounded liberal arts education strong in the humanities as well as in the sciences and providing many curricular and extracurricular opportunities for development of personal and social maturity, of sports and other recreational interests, and of musical and artistic talents.

The Curriculum

The formal curriculum consists of two parts—one required and the other elective. The required courses are selected to assure a good balance between the humanities and the sciences. They include 4 years of English, 4 years of social studies, 3 years of a foreign language, 4 years of science, 3 years of mathematics, 1 year of mechanical drawing, ½ year of science laboratory techniques, and the usual requirements in art appreciation music, and health education.

Objectives

A major goal of the school is to stimulate the initiative and independence of the student. It seeks to develop his ability to recognize and define problems and to plan a program of study and investigation for solving them. Intelligent and independent use of the library, the shop, the laboratory and other school and community resources is encouraged and stressed.

A second major goal of the school is to identify and develop creativity, particularly in the sciences and mathematics. Too many students are mental conformists who learn thoroughly the well established content of the curriculum but who are reluctant to venture down the untrodden paths to explore new thoughts, methods, and ideas. In part, the conventional school situation is responsible for this timidity and lack of intellectual boldness because so high a premium is placed upon meeting or surpassing the expected norms of achievement in each grade as measured by CEEB and similar tests. Yet, if the school program is to stimulate creativity, it must consciously plan and make a place for it just as it provides for the mastering of content. At the Bronx High School of Science, this is done informally in the regular classes in the various subjects to an extent that depends upon the alertness of the individual teacher in recognizing the creative pupil and in launching him on a creative mission.

The Creative Science Project Program

The science project program has at its exclusive disposal 4 laboratories, a green house, and an animal room. The students who take part in this program identify themselves by asking to be assigned to it or are identified by teachers

Dr. Taffel is Principal of The Bronx High School of Science, Bronx, N. Y.

who encourage them to apply. Each student is screened by a coordinator and, if admitted to the program, is assigned to one of the laboratories under the supervision of an assigned teacher. Here, students meet daily and explore each others' interests and ideas for the purpose of defining the problems which they would like to attempt to solve. After several weeks, each student has settled on a problem and begins to assemble the information, books, equipment, and materials needed to solve it. In addition to his regularly assigned period, the student may come to the laboratory during free periods and before and after school. From time to time, all the project pupils meet as a class to make progress reports to each other and to seek and give help and critical appraisal. These sessions broaden the experience and the outlook of all the students by giving them closer views of research areas and methods other than their own. The culmination of these research experiences includes presenting some of the findings at meetings of school clubs, assemblies, science fairs and congresses, school science publications, etc. An important outgrowth of this program has also been the establishment of contact with local research institutions who offer the students opportunities for apprenticeship to scientists in the field.

The Extra-Curricular Program

Particularly important in encouraging well-rounded individual development is the rich extra-curricular program which includes the orchestra, three choruses, chamber music groups, dances, publications, student government, intra-mural athletics, varsity athletics, and a public affairs forum. It is interesting to note that, though their academic program seems heavy, the students find time for the widest variety of out of class and out of school activities. Although somewhat younger than their grade peers in other schools, they handle themselves well in interscholastic sports competition, excelling in track, swimming and tennis. They have won the New York City tennis championship for the last four years.

Where Does the Program Lead?

What happens to these students when they leave us? All generally go on to college and higher education. An extensive survey of graduates made several years ago, indicated that about 70% of a sampling of 2000 alumni were in or were preparing for careers associated with science or mathematics. More recent surveys confirm this trend so that it would appear that the school is successfully accomplishing one of its major missions, guiding many qualified students into the scientific and mathematical professions.

Although the school is only 22 years old and none of its graduates has been out of college more than 18 years, many of its alumni have already achieved places of distinction in the scientific and academic worlds. The current head of research for the United States Defense Department is one of our alumni as are also many heads of laboratories, professors, doctors, and research scientists. In a recent year, 0.5% of all the doctorates given in the United States in the sciences and mathematics were awarded to Science graduates and 12% of all the predoctoral and postdoctoral grants made by the National Science Foundation in New York State were also awarded to Science graduates. Many Science graduates are also to be found in all the other fields and professions,—art, music, law, drama. Here, too, they are winning distinction.

As the school faces its future, it draws confidence from the validity of its past program but is not content to rest on its laurels. A lively program is under way for evaluating and modifying its curriculum to meet the needs of the changing times. Several experimental programs dealing with content reorganization, scheduling and teaching methods are being contemplated. Above all, attention is being strongly focused on furthering individualization of our program and individual creativity and imagination.

A UNIQUE PROGRAM OF PARENTS AND COMMUNITY PARTICIPATION IN EDUCATION OF THE GIFTED

Madeline F. Coutant

THE Board of Cooperative Educational Services of Oneida County, New York with the aid of grants from the Ford Fund for the Advancement of Education, and State Aid from the State Education Department, has experimented for the past five years with new ideas for educating the gifted. All programs are designed to help parents provide high quality opportunities for the most promising children in special fields.

In some cases the opportunities were developed by the regular staff within the school day of five school systems in the First Supervisory District. These schools which enroll over ten thousand students, vary greatly from each other. However they present a typical sample of the schools in upstate New York in rural, manufacturing, and suburban areas. In other cases programs were instituted outside of school hours, during the regular school year, and summer. Since the five schools are grouped within a fifteen mile strip, a system of "shuttle buses" between schools is necessary to transport pupils for these district-wide programs.

Parents and many other adults in the community have been involved at all steps in the development of the new programs. Our slogan (first stated quite incidentally one day by a parent) has been, "Let's put the family back into education." Parents are welcomed everywhere, and work in almost every phase of the programs. We listen carefully to their comments and suggestions, study them, and incorporate as much as we can into our activities. Some parents take an active part in assessing the interests and abilities of their own children, as well as in building curricula to develop them. Parents who are specialists, act as teachers and advisors. All parents are encouraged to visit classes frequently. A few have chosen to actually become regular class members, and study along with their children.

Other important supports for the program have come from industries, museums, colleges and other organizations in the community.

Artists from the community, and from the Munson-Williams-Proctor Institute have acted as advisors, and have cooperated in conducting courses in their studios. The Board of the Munson-Williams-Proctor Institute has provided scholarships for summer theater for the top dramatics students. The Institute has also made its beautiful new building available at Christmas time for repeat performances of Humperdinck's Hansel & Gretel.

The neighboring colleges of course, contribute in a variety of ways. Their laboratories in mineralogy, metallurgy, and electronics and an observatory are open to us. Our pupils are invited to lectures and conferences held on campus. College students assist in teaching an experimental course in logic using the new learning machines.

Fine relations with the theater groups in our area have also been established. Dramatics students are privileged to observe the setting-up operations, and to meet the principals in professional road companies. Arrangements are made for them to act as apprentices for two or ten week periods in summer stock.

The preceding remarks indicate only a part of the total cooperation of parents, community specialists and organizations that has been a large factor in the successful development of the Oneida County programs for the gifted.

MRS. COUTANT is Coordinator of Programs for the Gifted in Oneida County, District 1, New York.

BOOK REVIEWS

JOHN C. GOWAN

KOUGH, JACK. *Practical Programs for the Gifted.* Chicago, Ill.: Science Research Associates, 1960, 191 pages.

This book is a useful and practical addition to the growing literature on the able, because it takes a limited and definitive task and performs it well, bringing in valuable new material not elsewhere available in the process. The nine chapters include the introduction, administrative provisions, identification of able and of talented students (a wise discrimination), initiation of a program, motivation, examples of significant programs, consultants and their uses, and special activities for the gifted.

The book seems planned for those districts about to start a program, and for the assistance of those to be placed in charge of such a program. It will be most useful in this regard because the "how" is explicit, but the "why" is evident.

Chapter 1 gives an excellent introduction to the use of the book for a district embarking on a program. Chapter two contains the usual discussion of administrative provisions. Chapter three and four on identification of the academically gifted as opposed to the specially talented is valuable but reads a little like the earlier handbooks with which the author was associated. Chapter 5 on initiating a program would be strengthened by a more obvious time schedule and more emphasis on the in-service training of teachers. Chapter 6 on motivation written by two guest authors is probably the weakest in the book as it does not address itself to the subject, but wanders off in describing their activities. Chapter 7 is a well done survey of significant programs around the nation which is perhaps the best since the earlier Havighurst survey. It is the last two chapters however, which really distinguish the book. Chapter 8 is an absolutely unique compendium of the available authorities in the field, and their uses as consultants, something badly needed for a long time. Someday it may be better done, but this volume did it first. Chapter 9 is mistitled "activities for the gifted," when it should be called "agencies interested in the gifted."

The book bears some marks of being hastily done. There is nothing on evaluation, nor any evaluative criteria, nothing on guidance, nor the teacher of the gifted, nor several other germane matters.

WOOLCOCK, C. W. *New Approaches to the Education of the Gifted.* Morristown, New Jersey: Silver Burdett Company, 1961. 112 p. $2.

This booklet of 112 pages from an educator who has long been connected with the education of gifted children at the Hunter College High School, provides a rather succinct general statement which emphasizes theory and recommendations. It contains eight chapters on status of research, present weaknesses, needs, new developments, implications for elementary, junior high school, and senior high school educational procedures, and a summary. The book is strongest on recommendations, and these come from a man who has had practical experience in administering a program. There is not much on guidance or administrative procedures. There is a summary documentation of the relative merits of grouping and acceleration, while the literature on underachievement and creativity is treated rather lightly. The bibliography of 87 references is spotty and does not run later than 1958.

DR. GOWAN is Professor of Education, State College, Northridge, Calif.

BRIEFING THE JOURNALS

JOHN C. GOWAN

BEREITER, CARL. "Verbal and Ideational Fluency in Superior Tenth Grade Students." *J. Educational Psychology.* 51 (Dec. 1960) 337-45. Eighteen adapted Guilford tests were given 250 X graders with separate factor analyses by sex. For girls the reference factors of verbal fluency, word fluency, associational fluency and expressional fluency were replicated but for boys there was only a general fluency factor. Apparently non-verbal ideational fluency is accessible to measurement but its dimensions are at present unknown.

GROOMS, R. H. and EADLER, N. S. "The Effect of Anxiety on Academic Achievement." *J. Educational Psychology.* 51 (Oct. 1960) 299-304. Using 91 male college students, writer found no relationship between anxiety and academic achievement.

HOLLAND, J. L. "The Prediction of College Grades from Personality and Aptitude Variables." *J. of Educational Psychology.* 51 (Oct. 1960) 245-54. A correlation study using about 1000 National Merit Finalists on the 16 Personality Factor Test and other similar instruments in correlation with high school grades and the SAT. Some non-intellective factors were found useful for prediction of achievement. Writer concluded: "Colleges with different atmospheres tend to attract different kinds of students."

LESSINGER, L. M. and MARTINSON, RUTH "The Use of the California Psychological Inventory with Gifted Pupils." *Personnel and Guidance J.* 39 (March 1961) 572-75. Highly significant differences were found between gifted and average children at the 8th grade level on the CPI in the direction of greater psychological maturity for the able. Study excerpted from the 1961 final report of the California Pilot Project.

MARTINSON, RUTH (Director) *Educational Programs for Gifted Pupils.* Sacramento: California State Department of Education. Jan. 1961. Final report of the California Pilot Project comprises 273 pages and 19 chapters. The program involved nearly 1000 students plus controls.

MCGUIRE, CARSON, HINDSMAN, E. KING, F. J. and JENNINGS, E. "Dimensions of Talented Behavior." *Educational and Psychological Measurement.* 21 (Spring 1961) 3-38. This significant factor and regression analysis of educational achievement used 1200 Texas seventh graders divided by sex with a matrix of 39 variables including cognitive, perceptual and psychomotor abilities, personality and motivational assessments, measures of group pressures, and five measures of achievement. Creativity was excluded. Careful controls permitted identification of a high amount of variance. Motivational factors of achievement appear more specific than previously considered, and seem to be affected by sex, achievement variable (teacher's grades or achievement test, and even by community). Redefinition, flexibility, sensitivity to problems and aspects of closure are important elements of cognitive behavior. The factor analysis of the total group yielded I: Cognitive Approach (STEP, CTMM). II: Divergent Thinking (Seeing Problems, consequences). III: Socially Oriented Achievement Motivation (Socialized Morale, Scholastic Motivation, Stability vs. emotionality). IV: Peer Stimulus Value (Peer Acceptance, Social Effectiveness). V: a negative factor possibly the polar opposite of IV. VI, VII, VIII: Sex linked factors involving either anxious emotionality or anti-social wariness for boys, and sensitive dependency for girls. The first study of the Human Talent Project has thrown light on the complex nature of achievement.

EDITORIAL

How much should the gifted be permitted to utilize his talent in childhood? If he himself has the desire and the ability to function on a productive mature level, should this be permitted?

Hide what you know about great music (to the musically gifted); about the styles of the giants of literature (to the verbally gifted); about the historically significant masters of art (to the artistically gifted). The other children won't understand. They will think you odd, queer, strange, too unlike themselves. They will make fun of you, ridicule you, deride you. Life will be less full of heartache, easier, happier, if you learn to hide your talents.

These words of wisdom have been uttered by professors to their students, who in turn whisper the philosophy to their pupils. The elementary principal thus counsels the gifted who come to his attention. Teachers, knowing the carefully thought out point of view of the dedicated and respected principal, adopt this as their own as well. Some parents relying on the wise guidance of schools tend to accept and approve this attitude, others might not find this so palatable. The child is then in the middle.

When difficulties appear, none alone pay the penalty. The child's problems may manifest themselves in emotional and physiological difficulties as well as academic ones. The parents pay with anxiety and money in supplying medication and remediation. The schools pay in a splintering of their attention. Rather than focusing on constructive study of new research in diverse fields, concern must remain with age old problems such as underachievement. To what extent are we as school people accepting the responsibility in helping to produce underachievement (though we are quick to agree children must be taught responsibility)?

Might not early inculcated ideas become habit forming predisposing the child to under-function as a permanent life pattern? Is it any wonder that those concerned with the problems of the gifted advocate that parents be as oriented to the literature in this field as those who professionally work with the gifted?

But if we assume that problems can be prevented, an essential construct is that causative factors be identified, and where possible eliminated. Mere treatment of the symptoms brings only momentary alleviation, with emergence of new symptoms to replace the old.

There is a need for a new focus on the gifted, their achievement and lack of achievement. A place to begin is with our attitudes toward the gifted. We cannot expect responsibility from them sans assuming it ourselves, we cannot demand a given level of performance, rather we can help them set goals which require their best, if high aspirations are to be achieved.

To this end we must ask ourselves not only who are the gifted, where are their talents, how are they to be nurtured, what are the benefits to society, but also when should they be encouraged to use their talents to the fullest?

Some children it is suggested might be compared to plants whose full maturity is attained early. They are ready to function at their maximum in relative youth. If this is not recognized, the time for productivity is lost. Have the gifted children in your homes and classrooms, who are ready, been given the opportunity to perform in public at a professional level? Has their work been exhibited, published, produced, performed, publicized?

A.F.I.

MATTHEWS LIBRARY
A.S.U. TEMPE, ARIZ

AVAILABLE FROM NAGC

JUST OFF THE PRESS

GUIDING PRINCIPLES FOR PARENTS AND TEACHERS OF YOUNG GIFTED CHILDREN

By

ANN F. ISAACS

Fifty cents in advance to:

NATIONAL ASSOCIATION OF GIFTED CHILDREN

409 Clinton Springs, Cincinnati

YOUR ADVERTISEMENT IN THE GIFTED CHILD QUARTERLY

reaches teachers, principals, supervisors, administrators, psychologists, parent, lay and professional groups as well as others.

Double Page	$200.00
Single Page	125.00
Half Page	75.00
Quarter Page	50.00
Classified (per word)	.25

($2.00 minimum)

THE GIFTED:

EDUCATIONAL RESOURCES

288 pp., cloth, $4.00

The first book of its kind, this new volume answers the need for a detailed survey of public and private school action in response to the educational needs of our ablest students. Features include:

Statistics and descriptions of the programs of 800 schools
Special Educational Programs
Facilities and offerings classified
College courses for the teachers of the gifted
Colleges and universities participating in CEEB APP
College honors programs
Associations and institutions interested in the gifted
Bibliography

Order from

PORTER SARGENT

11 BEACON STREET BOSTON 8, MASSACHUSETTS

Publisher of THE HANDBOOK OF PRIVATE SCHOOLS
The annual descriptive survey of independent education

THE NATIONAL ASSOCIATION FOR GIFTED CHILDREN
409 CLINTON SPRINGS AVENUE
CINCINNATI 17, OHIO

Non-Profit Organiz
U. S. POSTA
PAI
CINCINNATI, O
PERMIT 921

Mathews Library
Arizona State University
Tempe, Arizona

FOR A BRIGHTER WORLD TOMORROW, LET US AID GIFTED CHILDREN
IDENTIFY, DEVELOP AND WISELY USE THEIR TALENTS TODAY—JOIN NAGC

MEMBERSHIP APPLICATION

The National Association for Gifted Children, 409 Clinton Springs Ave., Cincinnati 17, O

Date_____

Name_____ Telephone Number_____

Home Address_____
Street City Zone State

School, Business or Profession_____

We welcome you as:

AN INDIVIDUAL	A GROUP
_____$5 a Regular Member	_____$25 a Regular Member
_____$10 a Contributing Member	_____$100 a Contributing Membe
_____$25 a Sustaining Member	_____$500 a Sustaining Member
_____$100 a Life Member	_____$1000 a Patron